

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF OHIO  
EASTERN DIVISION

MDL NO. 2804

CASE NO. 17-md-2804

Hon. Dan A. Polster

IN RE: NATIONAL PRESCRIPTION OPIATE LITIGATION

THIS DOCUMENT RELATES TO:

TRACK THREE CASES

REMOTE VIDEO DEPOSITION OF  
CALEB ALEXANDER, M.D.

May 27, 2021

REPORTED BY: Laura H. Nichols  
Certified Realtime Reporter,  
Registered Professional  
Reporter and Notary Public

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(All Appearing Remotely)

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Mr. Justin Bond, Videographer

Veritext Legal Solutions

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S T I P U L A T I O N

IT IS STIPULATED AND AGREED, by and between the parties, through their respective counsel, that the deposition of CALEB ALEXANDER, M.D. may be taken before Laura H. Nichols, Commissioner, Certified Realtime Reporter, Registered Professional Reporter and Notary Public;

That it shall not be necessary for any objections to be made by counsel to any questions, except as to form or leading questions, and that counsel for the parties may make objections and assign grounds at the time of trial, or at the time said deposition is offered in evidence, or prior thereto.

1 I, Laura H. Nichols, a Certified  
2 Realtime Reporter and Registered Professional  
3 Reporter of Birmingham, Alabama, and a Notary  
4 Public for the State of Alabama at Large, acting as  
5 Commissioner, certify that on this date, as  
6 provided by the Federal Rules of Civil Procedure of  
7 the United States District Court, and the foregoing  
8 stipulation of counsel, there came before me  
9 remotely via Zoom, on May 27, 2021, commencing at  
10 9:33 a.m. EDT, CALEB ALEXANDER, M.D., witness in  
11 the above cause, for oral examination, whereupon  
12 the following proceedings were had:

13 \* \* \*

14  
15 THE VIDEOGRAPHER: Good morning.  
16 Today is May 27th, 2021. We are on the record at  
17 9:33 a.m. Today we will take the videotaped  
18 deposition in Case Number 17-md-2804. This  
19 deposition is being held remotely.

20 Would you please swear the witness?

21  
22 CALEB ALEXANDER, M.D.,  
23 having been first duly sworn, was examined and  
24 testified as follows:  
25

1 EXAMINATION BY MR. MANNIX:

2 Q. Dr. Alexander, good morning. My name  
3 is Paul Mannix, again, and I represent Giant Eagle  
4 in this matter. We've called you here today to be  
5 deposed in connection with your expert report in  
6 the Track 3 litigation, opiate litigation.

7 You are in Maryland; is that right?

8 A. Yes, that's right.

9 Q. Okay. I'm here in Pittsburgh and I  
10 believe we're ready to begin.

11 I confirm that you did receive  
12 documents that were sent to your office, and we'll  
13 be referring to those as we proceed, at least a  
14 large number of those. And I'll ask you to pull  
15 them out of the envelope when the time arises.

16 To begin with, can you state your  
17 name for the record?

18 A. George Caleb Alexander.

19 Q. And your current employer is whom?

20 A. I'm employed through Johns Hopkins  
21 University. And I also have a consultancy that's  
22 separate and independent from Johns Hopkins.

23 Q. And what is that consultancy name?

24 A. Monument Analytics.

25 Q. You understand you're under oath

1 today; is that right?

2 A. Yes, I do.

3 Q. And any reason you cannot give  
4 truthful and complete testimony here today?

5 A. No, there's no reason why I can't  
6 give truthful and complete testimony.

7 Q. Have you testified in a deposition  
8 before?

9 A. Yes, I have.

10 Q. And how many times have you testified  
11 in a deposition?

12 A. I believe two. But my -- you know,  
13 Mr. Arnold might correct me if I'm mistaken there.

14 Q. Okay. And we did receive, in your  
15 report, an Appendix C, which identified two cases  
16 that you were deposed in.

17 Any other cases, besides those cases,  
18 that you've been deposed in?

19 A. Well, I'm actually second-guessing  
20 myself and wondering if it's three.

21 But may I ask Mr. Arnold to -- reply  
22 or let me know the two that you have and I can note  
23 if there's a third that I think may also be  
24 relevant?

25 (Exhibit 6 was marked for

1 identification.)

2 Q. (BY MR. MANNIX:) Well, why don't we  
3 do this. We're going to get into that exhibit at  
4 some point in time. Why don't you open up the  
5 package, Exhibit 6.

6 A. Okay.

7 Q. And let me know if that's Appendix C  
8 to your report.

9 A. Yes, it is.

10 Q. And I've reviewed this, and it looks  
11 like I've seen three cases on Appendix C, two in  
12 the first page and one on the second page, which it  
13 appears you're deposed in. Is that accurate?

14 A. Yes. So I believe the first, you  
15 know, CT1 entitled Orange County, and the  
16 California case, and the CT2, Cabell County and  
17 City of Huntington. So it is three total.

18 Q. Other than those cases, have you been  
19 deposed at all?

20 A. No, I don't believe so.

21 Q. Okay. So you have a general  
22 understanding. I'll review some ground rules with  
23 you. I'm going to ask you questions today. If you  
24 don't hear them, let me know and I'll repeat them.

25 If you don't understand the question,

1 let me know and I'll rephrase it. And do your best  
2 to let me fully ask my question before you answer  
3 and I will do my best to let you fully answer  
4 before I ask my next question. Okay?

5 A. Of course.

6 Q. What did you do to prepare for this  
7 deposition?

8 A. Well, I mean, in some sense, my --  
9 all of the work that I've done, understanding the  
10 local context of Lake and Trumbull Counties and  
11 reviewing all of the materials and writing my  
12 report is preparation.

13 But in addition to that, I met with  
14 counsel and some team members that supported me in  
15 producing my report to review -- to review my  
16 report.

17 Q. Okay. And I understand your point.  
18 I'm asking primarily, after you prepared your  
19 report, you were notified you were going to be  
20 deposed today. And what did you do in order to  
21 prepare specifically for the deposition today?

22 And you said you met with team  
23 members; is that right?

24 A. Sure, correct.

25 Q. And you met with counsel; is that

1 correct?

2 A. Correct, yes.

3 Q. And did you also review documents in  
4 connection with your preparation?

5 A. Yes, I did.

6 Q. And I assume you reviewed your  
7 report; is that right?

8 A. Yes, it is.

9 Q. Any other specific documents that you  
10 reviewed that you thought necessary to review in  
11 order to prepare for your deposition?

12 A. Well, by "report," I reviewed both my  
13 narrative report as well as, for example, the  
14 redress models that are included in my report. And  
15 I reviewed some background material that was  
16 referenced in my report.

17 Q. What background material do you  
18 recall reviewing?

19 A. For example, information from -- I'm  
20 sorry. I'm trying to recall. But another expert  
21 that submitted -- that submitted a report regarding  
22 the use of flags to identify potentially  
23 problematic or high-risk controlled substance, you  
24 know, prescribing or dispensing or distribution and  
25 the like.

1                   Catizone, I believe it is an expert,  
2     Mr. Catizone.

3                 Q.       Okay. Any other documents you recall  
4     reviewing, other than your report, redress model  
5     and the Catizone report?

6                 A.       Well, some information from the Ohio  
7     substance abuse monitoring system that provides  
8     some high-level trends in terms of adverse events  
9     related to opioids in the state.

10                Q.       Okay.

11                A.       I also reviewed some information  
12     about Lake and Trumbull Counties that provides  
13     background information, similar background  
14     information at a county level.

15                Q.       Okay. What documents were those that  
16     you just referenced there? Not the OSAM reports,  
17     but the Lake and Trumbull information, what  
18     specifically did you review in preparation for  
19     today's deposition?

20                A.       Well, for example, the community  
21     health improvement plans and Lake County's HUB  
22     report.

23                Q.       Okay. Anything else that you recall  
24     digging into in order to prepare for the  
25     deposition?



1           A.       Those were the -- those were the main  
2 materials. I mean, the vast majority of what time  
3 I did spend was spent simply reviewing my report  
4 itself.

5                   (Exhibit 7 was marked for  
6 identification.)

7           Q.       (BY MR. MANNIX:) Okay. If you could  
8 go to package Exhibit 7.

9           A.       Okay. I have that.

10          Q.       I am hoping Exhibit 7 is your CV. Is  
11 that your CV?

12          A.       Yes, it is.

13          Q.       And that's Appendix B to your report;  
14 is that right?

15          A.       Yes, it is.

16          Q.       And I won't go over this in great  
17 detail, but can you please summarize your  
18 educational background, the degrees that you hold?

19          A.       Well, I grew up in Pittsburgh. And I  
20 went to Oberlin for two years for college in Ohio,  
21 just north of Lake and Trumbull Counties, and went  
22 to University of Pennsylvania to complete my  
23 undergraduate training.

24                   At that point, I returned to Ohio and  
25 went to medical school at Case Western Reserve

1 University.

2 Following medical school, I went back  
3 to Philadelphia to complete a residency in internal  
4 medicine at the University of Pennsylvania.

5 Following my residency, I moved back  
6 to the Midwest, to Chicago, to the University of  
7 Chicago, to complete a Robert Wood Johnson Clinical  
8 Scholars Fellowship, which provides training in the  
9 nonbiologic sciences important to healthcare.

10 And that -- you know -- and I  
11 completed a master's in science while at the  
12 University of Chicago, and that marked the end of  
13 my formal educational training.

14 Q. What was your masters of science,  
15 what specific field?

16 A. It was a blend of health services  
17 research, biostatistics and epidemiology.

18 Q. And you are -- are you board  
19 certified as a doctor?

20 A. Yes, I am.

21 Q. In what field?

22 A. Internal medicine.

23 Q. Anything else?

24 A. I'm only board certified in internal  
25 medicine.

1 Q. Okay. And what licenses do you hold?

2 A. I have a license to practice medicine  
3 in the state of Maryland. And I have the  
4 appropriate state and federal controlled substance  
5 prescribing licenses, so as to allow for me to  
6 prescribe controlled substances.

7 Q. Any other licenses?

8 A. Well, I have -- I mean, I have a  
9 driver's license, but I don't have other medical  
10 licenses.

11 Q. Any other professional license you  
12 don't hold; is that right?

13 A. No, not -- no. I don't believe I do.

14 Q. And you are presently employed with  
15 Johns Hopkins. What is your title with Johns  
16 Hopkins right now?

17 A. Professor of epidemiology and  
18 medicine.

19 Q. Okay. Now, correct me if I'm wrong.  
20 As I understand, you're not a pharmacist, correct?

21 A. I'm not a practicing pharmacist, no,  
22 that's correct.

23 Q. You are not a toxicologist, correct?

24 A. I'm not a practicing toxicologist,  
25 but I have significant experience studying

1 substances such as opioids and understanding their  
2 epidemiology and -- and the evidence base to  
3 support abatement efforts.

4 Q. You're not a licensed toxicologist or  
5 hold yourself out as an expert toxicologist,  
6 practicing toxicologist; is that fair?

7 A. Well, I was asked to develop a  
8 comprehensive abatement plan for Lake and Trumbull  
9 Counties, and that didn't require me to have such a  
10 license, and I don't have such a license.

11 Q. Okay. And I'm not -- I'm just  
12 asking, understanding what your credentials are.  
13 I'm not asking what you think is required in order  
14 to prepare your report. So let me just make sure I  
15 understand who you are and what licenses you hold  
16 and what expertise you have.

17 Am I correct that you are not a  
18 statistician?

19 A. I routinely employ statistics,  
20 specifically biostatistics in the work that I do.  
21 So while I primarily identify myself as an  
22 epidemiologist and practicing internist, virtually  
23 all of my epidemiologic work incorporates  
24 biostatistics.

25 Q. Are you a pain management specialist?

1           A.       I'm a practicing internist, and many  
2       of my patients have chronic and acute pain. But I  
3       don't exclusively practice pain management, nor  
4       market my services as a pain management specialist.

5           Q.       Do you hold yourself out as an expert  
6       in pain management?

7           A.       As a practicing internist, I have to  
8       understand how to identify and manage pain because  
9       pain is so prevalent in my patient population. So  
10      there's not a day that I have clinic where a  
11      patient isn't -- one of my patients that I'm seeing  
12      isn't likely to have some complaint that involves  
13      pain.

14          Q.       Do you hold yourself out as an  
15      addiction specialist?

16          A.       I have been studying the opioid  
17      epidemic for, you know, a decade or more. And  
18      understanding the nature of addiction and how it  
19      manifests and how it can best be treated is  
20      something integral to what I do.

21                  But I don't have an addiction  
22      practice, if that's what you're asking. In other  
23      words, I don't market myself as an addiction  
24      specialist.

25          Q.       I'm just asking, do you hold yourself

1 out as an addiction specialist, yes or no?

2 A. Well, I believe I answered that.

3 Q. Is it "yes" or "no"?

4 A. What I would say is that addiction is  
5 a fundamental feature of the opioid epidemic, and  
6 much of my work is focused on understanding the  
7 nature of the epidemic, as well as how harms can  
8 best be mitigated. And so I have extensive  
9 experience in studying addiction.

10 Q. Do you consider yourself an addiction  
11 specialist, yes or no?

12 A. Clinically or nonclinically?

13 Q. Clinically. Clinically.

14 A. As a practicing internist, I have to  
15 be comfortable and equipped to manage any patient  
16 that walks in the door. And unfortunately, all too  
17 often, my patients have been impacted by addiction.

18 Q. So what I understand you're  
19 testifying to -- you're not giving me a yes-or-no  
20 answer -- you hold yourself out as an addiction  
21 specialist from a clinical standpoint, correct?

22 MR. ARNOLD: Objection. Asked and  
23 answered.

24 MR. MANNIX: It hasn't been answered  
25 yes or no. I don't know what he -- whether he's

1 saying he's an addiction specialist from a clinical  
2 standpoint or not.

3 Q. (BY MR. MANNIX:) Yes or no?

4 A. What I would say, as a practicing  
5 internist, because of how common addiction is, I  
6 have to be capable and prepared to manage  
7 addiction.

8 And so as a practicing internist, I  
9 am comfortable screening for, identifying and  
10 assisting patients in treating addiction.

11 Q. Do you hold yourself out as a  
12 clinical specialist in opioid disorders?

13 MR. ARNOLD: Objection to form.

14 A. I'm sorry. Can you ask that again,  
15 please?

16 Q. (BY MR. MANNIX:) Do you hold  
17 yourself out as a clinical specialist in opioid  
18 disorders?

19 A. Can you say more about what you mean  
20 by "hold yourself out as"?

21 Q. Do you consider yourself a clinical  
22 specialist in opioid disorders?

23 A. Unfortunately, I have encountered  
24 many patients over the past twenty years of my  
25 patients that have been impacted directly by the

1     opioid epidemic, some with addiction, some who have  
2     lost loved ones and so on.

3                     And so as a practicing internist, I  
4     feel equipped, and I think it's important that I'm  
5     equipped, to identify and address patients that  
6     have opioid use disorder, or who have otherwise  
7     been impacted by the opioid epidemic.

8                     So I will defer to you as to whether  
9     or not that qualifies as an opioid addiction  
10    specialist.

11                    But I primarily hold myself out as a  
12    practicing internist who's equipped to manage, you  
13    know, the day-to-day problems that come in the  
14    door. And all too often, that includes individuals  
15    that have been impacted by the opioid epidemic.

16            Q.       Do you consider yourself a clinical  
17    specialist in opioid disorders, yes or no?

18                    MR. ARNOLD: Objection to form.

19            Q.       (BY MR. MANNIX:) I want to  
20    understand whether you consider yourself one,  
21    Dr. Alexander, yes or no?

22                    MR. ARNOLD: Objection, form.

23            A.       I consider myself a practicing  
24    internist who's equipped to manage the next patient  
25    that walks in the door. And unfortunately, all too



1 often, that may be someone who has been impacted  
2 directly by the opioid epidemic.

3 Q. (BY MR. MANNIX:) If you could turn  
4 to Exhibit 6. Again, we talked about this  
5 previously. This is Appendix C to your report.

6 Do you have that in front of you?

7 A. Yes, I do.

8 Q. You have listed the other cases where  
9 you have been retained as an expert in Appendix C,  
10 Exhibit 6. They all appear to relate to opioid  
11 issues; is that right?

12 A. Yes. Yes, that is --

13 Q. And who retained you in the present  
14 case? Who do you understand retained your services  
15 in the present case?

16 A. Well, I --

17 THE REPORTER: Mr. Arnold --  
18 Mr. Arnold, your paper is shuffling, so if you  
19 could mute yourself a little bit, I'd appreciate  
20 it.

21 MR. ARNOLD: Sorry. My apologies.

22 A. In the present case, I mean, I'm here  
23 to serve the citizens of Lake and Trumbull County  
24 and the courts and the parties involved. My direct  
25 contact through counsel has primarily been with

1 Motley Rice.

2 So I don't know the precise answer to  
3 your question, I'm sorry to say. But, you know, my  
4 primary contact is through Motley Rice. But,  
5 again, I view my role as really serving the  
6 citizens of Lake and Trumbull Counties, as well as  
7 the other stakeholders in this case.

8 Q. (BY MR. MANNIX:) Who initially  
9 contacted you to get involved in this case?

10 A. I don't remember.

11 Q. Do you remember what law firm or what  
12 employer they had, who contacted you?

13 A. I believe it was likely Motley Rice,  
14 somebody at Motley Rice, but I don't know for sure.

15 Q. In these other cases where you  
16 provide expert services listed on Appendix C, was  
17 your primary contact in those cases someone from  
18 Motley Rice?

19 A. Yes. Yes, it has been.

20 Q. In the context of all of the cases  
21 that you worked on listed in Appendix C where  
22 Motley Rice was your primary contact, how much have  
23 you been paid, in total, for those cases? And when  
24 I say "you," I'm talking about Monument Analytics.  
25 Do you know how much they've invoiced total?

1           A.       I don't know.

2           Q.       Has it been over a million dollars?

3           A.       Yes, I believe it has.

4           Q.       Has it been over two million dollars?

5           A.       I believe it has.

6           Q.       Has it been over three million  
7 dollars?

8           A.       I believe it probably has.

9           Q.       Over four million dollars?

10          A.       I do not know.

11          Q.       And what is your present hourly rate?

12          A.       Nine hundred dollars an hour.

13          Q.       If you could go through the  
14 process -- we've opened some of them already, but  
15 why don't you go ahead and open the packages,  
16 Exhibits 1 through 8, which I think they were sent  
17 out as your report and your various appendices. I  
18 think that's A through F. And we'll talk about  
19 those.

20          A.       Sure. I will just stand up for one  
21 second, but I'm here.

22          Q.       Yeah, okay.

23                   (Pause.)

24          A.       Okay. I'm all set.

25          Q.       (BY MR. MANNIX:) All right. Do you

1 have Exhibits 1 through 8 available in front of  
2 you?

3 (Exhibit 8 was marked for  
4 identification.)

5 A. Yes. Yes, I do.

6 (Exhibit 1 was marked for  
7 identification.)

8 Q. (BY MR. MANNIX:) Okay. The Exhibit  
9 1, that is your expert report, without the  
10 appendices; is that right?

11 A. Yes, that's right.

12 Q. And that is dated 4 -- April 16th,  
13 2021, correct?

14 A. Yes.

15 Q. And is it fair to say that this  
16 contains a description of your analysis and your  
17 conclusions and the opinions you intend to offer in  
18 this case; is that fair?

19 A. Well, I haven't reviewed the document  
20 that was sent to me. But assuming that it  
21 represents -- that it's actually my report and it  
22 was printed correctly and so on and so forth, yes,  
23 that does represent -- in addition to the  
24 appendices that accompany it -- the opinions that I  
25 would be prepared to provide to the courts, unless

1 the judge and parties requested other information  
2 of me, in which case I would try to provide  
3 whatever I can to be of service.

4 Q. Okay. And I'm not going to ask you  
5 to review it word for word. But as we go through  
6 this, if you see anything that indicates to you  
7 that what I sent you was not your report, just go  
8 ahead and let me know that. Okay?

9 A. Yes.

10 (Exhibit 5 was marked for  
11 identification.)

12 Q. (BY MR. MANNIX:) So look at Exhibit  
13 5, if you would. Have that available. I'm going  
14 to quickly refer to your Exhibit 1 report. And  
15 then I want to go to Appendix 5, but would you  
16 agree -- or Appendix D, which is Exhibit 5.

17 Am I right that what's in front of  
18 you as Exhibit 5 is Appendix D?

19 A. I don't see a cover sheet to it, and  
20 I don't know the ordering of the Appendices. But  
21 it certainly seems plausible that it was Appendix  
22 D.

23 Q. Yeah. I'm not sure if there was a  
24 cover sheet on your Appendix D. But in any event,  
25 it says -- does it say in the upper right-hand

1 corner, "Materials Relied Upon - Report"?

2 A. Yes, it does.

3 Q. If you look at your expert report,  
4 Paragraph 11 -- this is Page 6 of Exhibit 1 -- and  
5 the last sentence of Paragraph 11 says, "A complete  
6 list of the documents I consulted in preparing this  
7 report is provided as Appendix D."

8 Did I read that correctly?

9 A. Yes.

10 Q. All right. And now if we turn to  
11 Appendix D, Exhibit 5, with that understanding, I  
12 want to talk to you about what you identify as the  
13 complete list of the documents you consulted. I --

14 A. May I say one thing, please?

15 Q. Well, I'm just going to ask you some  
16 questions.

17 A. Okay. Fair enough.

18 Q. If you want to answer the questions.

19 A. Okay.

20 Q. The Appendix D, I've reviewed  
21 Appendix D and I've noted, at least -- I know you  
22 may prove me wrong, is I did not see any reference  
23 to deposition transcripts that were reviewed listed  
24 in Appendix D.

25 Did you list -- are you aware of any

1 depositions listed in Appendix D?

2 A. I would have to review the appendix  
3 carefully to identify those. But I just want to  
4 add that the sentence at the end of Paragraph 11 is  
5 over and above any references that may be included  
6 in my report itself.

7 In other words, my report, I believe,  
8 includes, I don't know, five hundred or six hundred  
9 references. And so Appendix D provides  
10 supplemental references that were not formally  
11 referenced in my report, but were nevertheless  
12 consulted.

13 Q. Okay. I understand that. I  
14 understand that qualification. Fair enough.

15 Let me ask you, just -- do you know  
16 if you reviewed any depositions in connection with  
17 preparing this report?

18 A. I did. I did.

19 Q. What depositions do you know that you  
20 reviewed?

21 A. I reviewed -- well, I'm sorry.  
22 Depositions. I'm sorry. I thought you were asking  
23 about expert reports.

24 Did I review -- I don't believe that  
25 I reviewed depositions.

1           Q.       Okay. If you look at Page 12 of  
2 Appendix D --

3           A.       You know, I would want to -- I mean,  
4 I would like to look at the references in my report  
5 proper in order to better answer your question as  
6 to whether I reviewed depositions. I do not recall  
7 having done so, but I did have team members that  
8 helped me. Ultimately, you know, the work  
9 represents my own. But I would like to review the  
10 references in my report in order to provide you  
11 with a more definitive answer regarding your  
12 question.

13          Q.       So if there are depositions  
14 referenced in your report, it's your understanding  
15 that either you or a team member reviewed those  
16 depositions; is that right?

17          A.       Correct, or pieces of them. I mean,  
18 you know, for example, my discussions with April  
19 Caraway and Kim Frasier were really helpful in  
20 understanding the context on the ground and in  
21 Trumbull and Lake Counties. And so -- but I don't  
22 recall whether or not, as part of that process, I  
23 or a team member reviewed their actual depositions.

24                    So, again, it would be helpful to  
25 review my report in order to provide you with a,



1     you know, definitive answer regarding that.

2             Q.       Understood. But as you sit here  
3     today, you don't have a specific recollection,  
4     aside from reviewing your report, of what  
5     depositions, if any, you reviewed; is that fair?

6             A.       I don't recall having reviewed any  
7     depositions, as I sit here today, to prepare my  
8     report.

9             Q.       Okay. If you look at Page 12 of  
10    Appendix D, Exhibit 5 -- you have listed there the  
11    documents that you have reviewed by Bates number.  
12    Do you see that?

13            A.       Yes.

14            Q.       It says, "Production Documents."  
15                    You know, there's three pages of  
16    listed documents that seem to have Bates numbers of  
17    Lake or TRUM, T-R-U-M, meaning produced by  
18    Trumbull. Do you see that?

19            A.       Yes, I do.

20            Q.       And are you aware that Lake and  
21    Trumbull County produced over a million documents  
22    in this case?

23            A.       No, I'm not aware of that.

24            Q.       With that understanding, it's fair to  
25    say that you did not review over a million

1 documents produced by Lake and Trumbull County in  
2 this case; is that fair?

3 A. You know, I was asked to develop a  
4 comprehensive abatement plan. And I reviewed  
5 documents that my team and I identified as being  
6 most crucial to that effort. So what I was asked  
7 to do didn't require for me to review a million  
8 documents.

9 Q. Okay. And I'd ask you to just answer  
10 the question that I'm asking. And I didn't ask for  
11 an explanation as to why or why you didn't review a  
12 million documents. I just asked whether you  
13 reviewed them.

14 My understanding is you didn't review  
15 over a million documents produced by Lake and  
16 Trumbull Counties; is that fair?

17 A. Well, again. I was asked to develop  
18 --

19 Q. I'm not asking what you were asked to  
20 do, Doctor. I'm asking you whether or not you did.  
21 And I'm asking that you answer simply the question  
22 that I am asking.

23 MR. ARNOLD: Objection, form.

24 Q. (BY MR. MANNIX:) And I'll ask it  
25 once again. And I am going to request that you

1 answer the question asked, not what you want the  
2 question to be. Okay?

3 You've identified here -- and I don't  
4 have the exact number, but it's three pages, and it  
5 certainly looks like less than two hundred  
6 documents in this case that were produced by Lake  
7 and Trumbull Counties; is that correct?

8 A. I'm sorry. Can you ask that again,  
9 please?

10 Q. What you've identified here in your  
11 Appendix D as produced documents are the produced  
12 documents that you reviewed; is that right?

13 A. No. That's not correct.

14 Q. These are not -- you reviewed  
15 additional documents that were produced in this  
16 litigation, other than what you have identified  
17 here?

18 A. Yes, that's true.

19 Q. And what documents are those?

20 A. Well, I would have to look through  
21 them, but there are six hundred and fifty-one  
22 references in my report, and some of those were  
23 produced. So, you know, we would need to look  
24 through those together to answer your question.

25 Q. Okay. In combination with the

1 documents identified here starting on Page 12, and  
2 what's referenced in your report, identify the  
3 produced documents that you reviewed in this case;  
4 is that fair?

5 A. I'm not sure. I'm not sure.

6 Q. Okay. How were the documents that  
7 you reviewed in this case collected?

8 A. Well, I discussed that in my report,  
9 so I'd like to look at my report with you in order  
10 to answer that question.

11 Q. As you sit here today, you're not  
12 sure how your -- the documents that you reviewed  
13 were selected; is that correct?

14 A. No. My recollection --

15 MR. ARNOLD: Objection as to form.

16 A. I'm sorry. Can you ask that again,  
17 please?

18 Q. (BY MR. MANNIX:) As you sit here  
19 today, you are not sure how the documents that you  
20 reviewed were selected; is that correct?

21 MR. ARNOLD: Objection, form. Sorry.

22 A. That's not correct.

23 Q. (BY MR. MANNIX:) Okay. How were  
24 they selected?

25 A. Again, I would -- as I discuss in my

1 report -- and it would be helpful to review my  
2 report with you -- I describe a careful process  
3 whereby I comprehensively evaluated both the  
4 produced documents, as well as other literature,  
5 white papers, reports, peer-reviewed papers. And  
6 so on. And in a careful and systematic process,  
7 used these to develop my recommendations.

8 Q. If you can access in your report  
9 quickly -- you can refer to your report. I'm not  
10 precluding you from doing that. I don't want you  
11 to waste significant time that we have today to  
12 talk to you about your report in locating that.  
13 But if you know where that is, then that's fine.

14 A. Thank you.

15 So, for example, in Paragraph 15, I  
16 describe the stepwise process that I used to  
17 develop or review the scientific evidence. So for  
18 example, I started with the information I was aware  
19 of. I supplemented this with the review of  
20 additional academic and governmental studies,  
21 included in both their reference list, as well as  
22 subsequent reports that have cited those studies.

23 And I'd also used information such as  
24 I describe in Paragraph 11. So this includes  
25 reviewing materials, including Bates stamped

1 documents, deposition testimony provided to me by  
2 counsel, although I don't recall, as we've  
3 discussed, specific deposition records, published  
4 reports regarding the epidemic, information derived  
5 from other local and national sources,  
6 peer-reviewed literature, white papers, reports  
7 from public health authorities, nonprofit  
8 organizations and other publicly available sources.

9 In addition, I, along with some of my  
10 team members, spoke with local stakeholders, such  
11 as those that I've mentioned.

12 So that provides the waterfront, if  
13 you will, of the -- of the sources that I used.

14 And then, you know, there's a sort of  
15 stepwise process of evaluating the quality of  
16 information, and that also is included in Paragraph  
17 15 where I discuss a number of factors that are  
18 used to assess the scientific quality of  
19 information to address describing efforts to abate  
20 the opioid epidemic.

21 Q. Let me focus on Paragraph 11. You  
22 say the sources include, "Bates-stamped documents  
23 and deposition testimony in this case provided to  
24 me by counsel."

25 I want to focus on that sentence.

1 Okay?

2 A. Okay.

3 Q. How were the Bates-stamped documents  
4 that you reviewed provided to you by counsel  
5 selected?

6 A. I -- I don't know. You would have to  
7 ask the counsel.

8 Q. Okay. So your understanding, the  
9 Bates-stamped documents that you reviewed were not  
10 selected by you, they were selected by counsel and  
11 provided to you; is that fair?

12 A. Well, I mean, I -- no, not entirely.  
13 I mean, to be fair, I discussed with counsel -- I  
14 mean, my typical process is to discuss with counsel  
15 my goals and objectives and the type of information  
16 that I need. And then in an iterative process,  
17 review materials and discuss whether further  
18 materials would be helpful for review or not.

19 And, you know, counsel has been  
20 responsive and receptive and willing to provide me  
21 with the information that I've requested. And at  
22 no point did I have a concern during the process of  
23 developing my report that there were crucial  
24 statistics or data points or programs relevant to  
25 the case that I was not privy to or that I didn't

1 have access to understanding.

2 Q. Okay. So the process was, in part,  
3 you would explain to counsel, plaintiff's counsel,  
4 the type of documents that you were looking for,  
5 and they would search the produced documents and  
6 see if those could be located and provided to you.  
7 Is that generally correct?

8 A. Yeah. I mean, much of the  
9 information that I use is in the public domain.

10 Q. Well, wait a second, Doctor. I'm not  
11 talking about that. I want to focus on what my  
12 question is. And I'm talking about this sentence  
13 of Bates-stamped documents. So don't move on to --

14 MR. ARNOLD: Object to the form. The  
15 witness should be allowed to finish his answer.

16 I'll point out that some of the  
17 produced documents are also in the public domain,  
18 so his response was responsive to the question.

19 Q. (BY MR. MANNIX:) Okay. I'm going to  
20 ask to focus the question again.

21 On the Bates-stamped documents, those  
22 were -- you had discussions with counsel, and the  
23 type of documents that you were looking for, and  
24 the Bates-stamped documents were provided to you by  
25 counsel, correct?



1 MR. ARNOLD: Objection. Asked and  
2 answered.

3 A. Well, I think I answered that  
4 question. But I used many different sources of  
5 information. And wherever possible, triangulated  
6 information through the comparison of different  
7 sources of information.

8 And the core of my abatement program  
9 is not terribly controversial. That is there's  
10 widespread consensus regarding what needs to be  
11 done to reduce opioid-related morbidity and  
12 mortality.

13 The most important part of my report,  
14 as it applies to Lake and Trumbull Counties, is  
15 understanding the experience of these counties on  
16 the ground.

17 And I was fortunate to have more than  
18 sufficient opportunities to do so, both through my  
19 review of specific reports, such as the community  
20 health improvement plans, and the proceedings of  
21 the ASAP Coalition, and the Lake County Opioid Task  
22 Force, through my conversations with individuals  
23 like Kim Frasier and April Caraway. Through my  
24 review of state -- data provided by the State  
25 regarding county-level trends, and through many

1 other sources of information.

2 Q. (BY MR. MANNIX:) Did you review any  
3 documents that were produced by the defendants, to  
4 your knowledge?

5 A. I don't believe, for this case, that  
6 I did.

7 Q. Did you not consider documents  
8 produced by defendants relevant to your analysis?

9 A. I was asked to develop a  
10 comprehensive abatement plan for Lake and Trumbull  
11 Counties. And I didn't -- and, you know, at no  
12 point did I discuss or was I advised to review  
13 specific documents from the defendants as part of  
14 developing recommendations for how to  
15 comprehensively abate the epidemic.

16 Q. So plaintiff's counsel didn't send  
17 those to you to ask you to review. But what I want  
18 to understand is, did you think to yourself, those  
19 documents produced by defendant, those won't be  
20 relevant for my analysis, I don't need to see them?

21 A. What sort of documents are you  
22 referring to?

23 Q. Any documents from defendants.  
24 Documents that were produced by defendants. Did  
25 you consider those relevant to your analysis and

1 decide not to review them, despite the fact you  
2 thought they were relevant?

3 MR. ARNOLD: Objection, form.

4 A. I'm sorry. Can you ask that again,  
5 please?

6 Q. (BY MR. MANNIX:) Did you consider  
7 documents produced by defendants relevant to your  
8 analysis and decide not to review them in any  
9 event, despite the fact they were relevant?

10 A. I was asked to develop a  
11 comprehensive and evidence-based abatement plan for  
12 Lake and Trumbull Counties. And I don't believe  
13 that reviewing those documents was vital to my  
14 development of such a plan.

15 Q. Did you not consider relevant to  
16 determine if any of the pharmacy defendants were  
17 involved in providing some of the programs that you  
18 have identified as needed for the abatement?

19 A. I was not asked as part of -- I was  
20 not asked to perform a comprehensive retrospective  
21 evaluation of efforts to date, you know, defendant  
22 by defendant in these counties.

23 Q. Did you not consider existing  
24 programs within the counties to be relevant to your  
25 analysis and your abatement program?

1           A.       Did I not? I'm a little bit confused  
2 by the construction. I mean, I think -- I think  
3 the answer --

4           Q.       Let me ask this: Did you -- let me  
5 ask it this way: Did you consider existing  
6 programs within the communities to be relevant to  
7 your analysis of the abatement program that you're  
8 proposing?

9           A.       Yes, I did. And I carefully  
10 evaluated a great number of programs that have been  
11 undertaken in Lake and Trumbull Counties in an  
12 effort to reduce opioid-related morbidity and  
13 mortality.

14          Q.       So if the pharmacy defendants had  
15 existing programs which were set up to help the  
16 opioid epidemic in Lake County and Trumbull County,  
17 then it would have been relevant to review those;  
18 is that fair?

19                   MR. ARNOLD: Objection to the form.

20          A.       Well, I wasn't asked -- I'm sorry.  
21 Go ahead, Mr. Arnold.

22                   MR. ARNOLD: Objection to form. You  
23 can answer.

24          A.       I wasn't asked to perform a  
25 quantitative evaluation of programs to date. I did

1     qualitatively evaluate a large number of activities  
2     undertaken in Lake and Trumbull Counties. And I  
3     also -- I'm aware of and understand the potential  
4     value of interventions that can be implemented  
5     throughout the supply chain, including by  
6     pharmacies and pharmacists. And I believe that I  
7     discussed these in the context of my report.

8             Q.       (BY MR. MANNIX:) You just stated  
9     that you weren't asked to perform a quantitative  
10    evaluation, but you did conduct a qualitative  
11    evaluation; is that right?

12            A.       Correct. I -- I qualitatively  
13    evaluated a number of different interventions and  
14    programs and services that have been offered by  
15    Lake and Trumbull County or in Lake and Trumbull  
16    County, some by the County themselves, some by the  
17    State. And I did qualitatively evaluate these  
18    because these were helpful in my understanding  
19    the -- you know, the contours of the opioid  
20    epidemic to date.

21            Q.       Okay. And I have to understand this  
22    a little better. If there were a hundred programs  
23    in Lake County to address the opioid program [sic],  
24    are you saying that it wasn't important for you to  
25    analyze all one hundred of those programs; all you

1 had to do is take a sampling and analyze the  
2 quality of those several programs, and not worry  
3 about additional programs and analyze all of them?

4 Is that what you say by  
5 distinguishing between a qualitative analysis,  
6 which you did, and a quantitative analysis, which  
7 you said you didn't do?

8 MR. ARNOLD: Objection to form.

9 A. No, it is not.

10 Q. (BY MR. MANNIX:) If there were a  
11 hundred programs, it would have been important for  
12 you to review all one hundred programs and do a  
13 qualitative analysis of all hundred programs  
14 instead of just a few that you selected, correct?

15 A. No. I -- when I say "qualitative,"  
16 I'm -- firstly, when I say "qualitative," I'm not  
17 talking about a formal evaluation of the quality of  
18 a given program.

19 I think your question -- one question  
20 before the last one, sort of, you know, switched to  
21 talking about the quality of a program.

22 When I say "qualitative evaluation,"  
23 I'm saying that I used this information as a basis  
24 to understand the contours and the efforts that  
25 have been undertaken.

1                   And, again, I believe that there are,  
2                   as I describe in my report, important opportunities  
3                   for pharmacies and pharmacists and others in the  
4                   pharmaceutical supply chain to implement processes  
5                   and procedures to improve, you know, the safe  
6                   distribution of controlled substances, and to  
7                   reduce morbidity and mortality from these products.

8                   But keep in mind, my report is  
9                   forward looking. So it's built upon an  
10                  understanding of Lake and Trumbull County, but  
11                  I'm -- it's forward looking. And I didn't need to  
12                  net out the certain level, current level or  
13                  provision of services.

14                  It's clear that whatever has --  
15                  despite the best efforts of the counties, and  
16                  despite their having done, I believe, the best they  
17                  can with the resources that they've had available,  
18                  I believe there's still an epidemic in these  
19                  counties. And so my report focuses on looking  
20                  forward, not looking backwards.

21                  Q.       But wouldn't it be important to  
22                  know -- I understand they existed previously,  
23                  certain programs, exist now. But if the intent is  
24                  they will continue to exist, right, outside of  
25                  whether your abatement program is put in place,

1     isn't it important to know what those programs are  
2     that are intending to proceed prospectively?

3                     MR. ARNOLD:   Objection to form.

4             A.       I'm sorry.   Can you ask the question  
5     again, please?

6             Q.       (BY MR. MANNIX:)   Isn't it important  
7     to understand -- I gave you the example before of  
8     if there's a hundred programs that exist, and if  
9     all one hundred are intending to continue to exist  
10    into the future, isn't it important for you to know  
11    what those programs are so that you can build on  
12    those instead of abandoning all of those and start  
13    from scratch?

14            A.       Well, I'm not recommending abandoning  
15    anything.   I mean, ultimately it's up for the  
16    counties themselves to decide what the, you know,  
17    composition of their abatement going forward will  
18    be.

19                    But, again, I do discuss the  
20    important role of actors in the pharmaceutical  
21    supply system in my report.

22                    And I'd be happy to review that  
23    section of my report with you if that would be  
24    helpful for you to understand what I believe -- you  
25    know, what I believe -- how I believe that actors



1 within the pharmaceutical supply system can  
2 implement processes that can reduce opioid-related  
3 injuries and deaths.

4 Q. How did you confirm, one way or  
5 another, whether those processes and actions by the  
6 pharmacy companies that you're speaking of weren't  
7 already in place?

8 A. I was not -- my report -- I was asked  
9 to develop a comprehensive and evidence-based  
10 abatement plan. I was not asked to do a  
11 retrospective evaluation of the adequacy of  
12 programs to date by pharmacies.

13 Q. But if they're already -- if the ones  
14 that you recommend moving forward are already in  
15 place, why would you not analyze that and take that  
16 into consideration to figure out whether your  
17 proposal would be effective or not? If they're  
18 already in place, and you're proposing to do  
19 exactly what's already in place, why would that be  
20 successful?

21 A. My --

22 MR. ARNOLD: Objection. Incomplete  
23 hypothetical.

24 A. I'm sorry. Mr. Arnold, I think I  
25 spoke over you.

1                   MR. ARNOLD: Yeah. I just had an  
2                   objection. Incomplete hypothetical. You can go  
3                   ahead and answer.

4                   A. My recommendations, Mr. Mannix, rest  
5                   on an enormous evidence-based, a vast evidence base  
6                   of ultimately thousands, tens of thousands of  
7                   scientific studies. So, you know, the  
8                   recommendations that I make are not pulled out of a  
9                   vacuum.

10                  But just to be clear, I was not asked  
11                  to identify what's been done and net that out and  
12                  only recommend what I think is needed above and  
13                  beyond what may already be taking place. I mean,  
14                  consider treatment. I discuss treatment. And you  
15                  could have the same argument about treatment.

16                  Well, if Lake Geauga Recovery Center  
17                  is already offering treatment, then why are you  
18                  recommending treatment in your report?

19                  It's because I wasn't asked to  
20                  subtract out the services or the programs that may  
21                  already be offered.

22                  Q. Okay. So you were doing what you  
23                  were asked to do by Motley Rice in proceeding the  
24                  way you did; is that right?

25                  A. Well, you would have to ask them. I

1 mean, that seems to me like a question that has --  
2 you know, that it's not fair for me to answer  
3 alone.

4 But my hope is that my report is  
5 useful for the courts, and most importantly, for  
6 the citizens of Lake and -- Lake and Trumbull  
7 County that have been, you know, devastated by the  
8 opioid crisis.

9 Q. Okay. That's your hope, right?

10 A. Yeah.

11 Q. But were you doing -- using your own  
12 discretion on what the scope of your work would be,  
13 based on what your hope was, or were you doing what  
14 you were asked to do by Motley Rice --

15 MR. ARNOLD: Objection to form.

16 Q. (BY MR. MANNIX:) -- for the work you  
17 performed?

18 A. Well, I'd like to just review.

19 So in the very first paragraph of my  
20 report, I say, "I have been asked to discuss ways  
21 to abate or reduce the harms caused by the opioid  
22 epidemic, which has devastated the communities. I  
23 have also been asked to estimate the size of  
24 specific populations that may require abatement  
25 interventions."

1                   And that's what I believe I have  
2     done. I have discussed ways to abate or reduce the  
3     harms, and I have also estimated the size of  
4     specific populations.

5                   Q.        Okay. So that's what you were asked  
6     to do and that's what you did; is that right?

7                   A.        I believe so. I hope so. Again, I  
8     think you would have to ask others to judge that as  
9     well. I don't feel that I alone should be the one  
10    to judge whether or not I have fulfilled what I was  
11    asked to do.

12                  Q.        You attempted to do what you were  
13    asked to do, correct?

14                  A.        I did.

15                  Q.        Do you know Harvey Rosen? Are you  
16    familiar with Harvey Rosen?

17                  A.        Yes, I am.

18                  Q.        Have you met with Dr. Rosen  
19    personally?

20                  A.        No, I have not. I don't believe -- I  
21    don't believe so. I suppose it's possible in the  
22    course of other litigation work, such as CT1, that  
23    we may have been in the same room. But I don't  
24    recall.

25                  Q.        Okay. You didn't fly out anywhere or

1 drive out anywhere and meet with him, correct?

2 A. Not -- not -- not recently.

3 Unfortunately, the pandemic has made that sort of  
4 undertaking less easy than it would otherwise have  
5 been.

6 Q. Okay. That's a good clarification.  
7 Have you had personal phone calls or Zoom calls  
8 directly with Dr. Rosen?

9 A. Yes, I have.

10 Q. And when did those take place?

11 A. I don't recall.

12 Q. Did they take place before the date  
13 of your report and his report of April 16th, 2021?

14 A. I believe they would have.

15 Q. Approximately how many Zoom calls or  
16 phone calls did you have with Dr. Rosen?

17 A. I personally -- I believe I  
18 personally had one or two. And I believe members  
19 of my team likely had many more.

20 Q. Have you reviewed Dr. Rosen's report  
21 dated April 16th, 2021?

22 And it's Exhibit 39, if you want to  
23 review it, if you want to refer to it.

24 A. Oh, if you have -- yeah. So I  
25 have -- I have reviewed it, yes.

1 Q. Did you review drafts of that report?

2 A. I don't recall, but I certainly  
3 worked with Dr. Rosen to try to assist he and his  
4 team in any way that my or my team was able.

5 Q. Did you have an understanding that  
6 there were times where you were assisting him in  
7 helping him develop his analysis and his report?

8 MR. ARNOLD: Objection, form.

9 A. I'm sorry. Can you ask again,  
10 please?

11 Q. (BY MR. MANNIX:) Yeah. I'm trying  
12 to understand. You had conversations with him,  
13 your team had conversations with him. Did you  
14 understand that a purpose of the conversations  
15 between you and Dr. Rosen or your team and  
16 Dr. Rosen was to help him develop his analysis and  
17 prepare his report?

18 A. I mean, ultimately, Dr. Rosen is  
19 responsible for his report, just like I'm  
20 responsible for mine. But my effort in any call  
21 with anybody, including being here today, is to try  
22 to be helpful and communicate and provide the  
23 information that I can.

24 So I don't know if that answers your  
25 question. But in speaking with Dr. Rosen or his

1 team, my effort would be to try to assist him if he  
2 has any questions.

3 Q. Did you have an understanding, when  
4 you had your discussions with him, that his -- one  
5 of his end goals was to finalize a report that was  
6 to be produced in this litigation?

7 A. Yes, I did.

8 Q. And did you understand, when you had  
9 your conversations with him, that he was -- you  
10 were expecting him to take the information, the  
11 helpful information you were providing, however you  
12 were helping, to assist him in developing and  
13 finalizing that report?

14 A. Well, I mean, broadly speaking, I  
15 don't think I would be speaking with him about much  
16 other than issues relevant to his work or my work  
17 with respect to opioid litigation.

18 So I think, broadly speaking, all of  
19 the exchange was, in some sense, an effort to -- to  
20 provide any -- any helpful feedback or reactions or  
21 comments or thoughts regarding the opioid epidemic  
22 and our work in litigation.

23 Q. Did you or your team send to him any  
24 draft reports of your report before your report was  
25 finalized?

1           A.       I don't know.

2           Q.       Did you prepare draft versions of  
3 your report?

4           A.       Well, anything prior to the final  
5 would be a draft, so I don't know what you mean by  
6 "prepare." But I certainly had a working copy of  
7 the report prior to having a final copy of the  
8 report.

9           Q.       Okay. And were those circulated to  
10 anyone, Harvey Rosen or anyone else?

11          A.       I don't know. I did not -- I don't  
12 recall having provided a copy of my report to  
13 Mr. Rosen.

14          Q.       Do you recall circulating a copy of  
15 any draft reports to anyone else?

16          A.       Well, I think it's likely that I  
17 sent -- I or my team sent a copy, a draft of our  
18 report, to Mr. Arnold or one of his colleagues at  
19 Motley Rice.

20                   MR. ARNOLD: Counsel, we've been  
21 going for over an hour. If now or sometime soon  
22 would be a convenient time to take a break, we  
23 would appreciate it.

24                   MR. MANNIX: I'm always up for just  
25 stopping for breaks. I was planning on going until



1 10:45. I'd like to take one break and go to 12:30  
2 and then take lunch.

3 We can break now and then try to  
4 proceed accordingly. If we can go till -- can I do  
5 one more line of questioning? It's not all that --

6 MR. ARNOLD: Well, Dr. Alexander, do  
7 you want to go another ten minutes --

8 A. Yeah. That would be fine. Thank  
9 you. I think that sounds great.

10 MR. MANNIX: Okay. Thanks. And then  
11 our court reporter, videographer, speak up if you  
12 disagree. I'm just trying to keep to a workable  
13 schedule that I developed. And if anyone wants to  
14 comment, please do.

15 Q. (BY MR. MANNIX:) Dr. Alexander, you  
16 indicated -- you talked about Kim Frasier and April  
17 Caraway and Lauren Thorp a little earlier. And  
18 these are what you refer to as stakeholders, local  
19 stakeholders, who you did speak to; is that right?

20 A. Yes, it is.

21 Q. Okay. And in your report, those are  
22 the ones you identified as the individuals from  
23 Lake and Trumbull County who you personally spoke  
24 to.

25 Is there anyone else, as you sit here

1 today, who you spoke to in a similar fashion as you  
2 did to April Caraway, Lauren Thorp and Kim Frasier  
3 from Lake and Trumbull County to gain information?

4 A. I don't believe so.

5 Q. Let's talk a little bit about  
6 these -- I don't know if they're personal meetings  
7 or Zoom calls or phone calls.

8 Let's talk about Kim Frasier first.  
9 Did you meet with her personally? Did you have a  
10 Zoom call with her? Did you talk to her on the  
11 phone? What was the context of your discussion  
12 with her?

13 A. I believe it was a phone call, at  
14 least for me.

15 Q. Okay. Was it one phone call or  
16 several phone calls with Kim Frasier?

17 A. I don't recall. I believe it was one  
18 call. It may have been two different times that we  
19 engaged, but it was certainly -- there was  
20 certainly one.

21 Q. Whether it was one or two combined,  
22 how long did you speak with Kim Frasier?

23 A. Well, again, I don't recall if there  
24 was a second call or not. I believe the first call  
25 was about fifty -- forty-five to fifty minutes.

1           Q.       If you had a second call, was it  
2 shorter than that, or do you think it could have  
3 been similar?

4           A.       Probably similar duration, if there  
5 was a second call.

6           Q.       All right. So you spoke to her  
7 somewhere between forty-five minutes and an hour  
8 and a half; is that fair, whether it's one or two  
9 calls?

10          A.       Well, if they were both fifty  
11 minutes, I guess it would have been an hour and  
12 forty minutes, but that's correct.

13          Q.       Okay. Somewhere in that range.  
14 Do you know when those were held?

15          A.       I do not. I mean, within the past,  
16 you know, four months, but I don't know the precise  
17 date.

18          Q.       It was in 2021, you think?

19          A.       Yes, I do believe so.

20          Q.       Who else was on that call, besides  
21 you and Kim Frasier?

22          A.       Yeah. I don't recall for sure, but  
23 my guess is Katherine Ozenberger, who's a colleague  
24 of mine at Monument Analytics. Last name  
25 O-Z-E-N-B-E-R-G-E-R.

1                   Elena Fernandez. First name  
2                   E-L-E-N-A, and last name F-E-R-N-A-N-D-E-Z.

3                   Possibly Omar Mansour. First name  
4                   O-M-A-R, last name M-A-N-S-O-U-R. I believe  
5                   Mr. Arnold would have been there. I believe  
6                   Mr. Frank Gallucci may have been on the call. And  
7                   a co-counsel or colleague of Mr. Gallucci's --  
8                   first name is Sal, and I apologize, but I don't  
9                   recall the last name.

10                  But those would be the main  
11                  colleagues of mine from Monument Analytics and the  
12                  main counsel that I believe may have been present.

13                  Q.        Okay. And so if I understand, it was  
14                  Kim Frasier, you and individuals from your team and  
15                  individuals from plaintiff's counsel's firm,  
16                  correct?

17                  A.        Correct.

18                  Q.        And then what was the -- what were  
19                  you attempting to obtain -- what information were  
20                  you trying to obtain from Kim Frasier?

21                  A.        Well, these calls are very helpful  
22                  because they allow for -- you know, I spoke earlier  
23                  about triangulation. And this is an example where  
24                  these types of calls allow for me to triangulate  
25                  information that I am hearing or reading about or,

1     you know, taking in from varied sources, and to  
2     get -- to get a perspective from someone that has  
3     day-to-day boots on the ground.

4                     And so we spoke about a large number  
5     of matters relevant to, in Kim's case, the  
6     activities within Lake County that are relevant to  
7     this case.

8                     Q.       Do you recall who suggested you meet  
9     with her? Did you identify her as someone you  
10    wanted to speak to, or did someone else identified  
11    her as someone you should speak to?

12                    A.       I think there -- she was a natural.  
13    I don't recall specifically, but she was a natural  
14    because of -- because of her position as executive  
15    director of the Lake County Board of Alcohol, Drug  
16    Addiction and Mental Health Services.

17                    Q.       Did you maintain -- take and maintain  
18    any notes related to that meeting?

19                    A.       I don't believe that I did. I  
20    believe one of these calls I may have. And I  
21    believe for two of them, while typically it's my  
22    practice to maintain notes, I believe for two of  
23    these I was driving and did not take notes  
24    personally.

25                    Q.       Do you know if anyone on your team

1 took notes?

2 A. I do not.

3 Q. How about Lauren Thorp, how many  
4 times did you meet with her?

5 A. I believe, one.

6 Q. Excuse me, I include telephone calls,  
7 Zoom calls.

8 A. Right. Right.

9 Q. Personal meetings.

10 A. Yeah. I believe once.

11 Q. Was that a phone call, Zoom call,  
12 personal meeting?

13 A. Again, I believe it was either phone  
14 or Zoom. I do not recall.

15 Q. Did that happen in 2021?

16 A. Yes. I believe it did.

17 Q. And was it a similar situation where  
18 there was -- Lauren Thorp, other people from your  
19 team, as well as representatives from plaintiff's  
20 counsel?

21 A. Yes, I believe so.

22 Q. What, specifically, were you  
23 attempting to obtain, what information were you  
24 seeking to obtain from Lauren Thorp?

25 A. Well, as director of recovery and

1 youth programs at the Trumbull County Mental Health  
2 and Recovery Board, I believe that Ms. Thorp has a  
3 valuable perspective to offer regarding the  
4 activities that the Mental Health and Recovery  
5 Board has taken, many of which have been undertaken  
6 through the ASAP Coalition, to try to reduce  
7 opioid-related morbidity and mortality.

8 Q. Did you maintain any notes from that  
9 meeting?

10 A. I don't believe that I did.

11 Q. Was it your testimony that you  
12 thought two of these -- well, I guess there might  
13 have been more than one time.

14 Do you know if that call with Lauren  
15 Thorp was in your car, or could have been in your  
16 office, or do you recall where you were when you  
17 were taking that call or Zoom?

18 A. I don't recall. Again, I believe  
19 that one of these -- in speaking with one of these  
20 three individuals, I believe that I may have taken  
21 some notes. And in speaking with the other two, at  
22 least one of those conversations, I believe I was  
23 in a car and not in a position to take notes.

24 Q. And then April Caraway, how many  
25 times did you meet with her, personally or Zoom or

1 over the phone?

2 A. I believe -- I believe once.

3 Q. Approximately how long was that call?

4 A. I don't recall.

5 Q. Would it have been similar to what we  
6 talked about with Kim Frasier, somewhere between  
7 forty-five minutes and fifty minutes, less or more?

8 A. Yeah. I mean, typically, I like to  
9 speak with these types of individuals for -- until,  
10 you know, at least as long as I feel like allows  
11 for me to get a good sense of their perspective on  
12 the opioid epidemic and the abatement efforts to  
13 date within their communities. And so I don't know  
14 the precise duration of the call. But I can tell  
15 you that I felt comfortable, based on the calls and  
16 based on my -- the totality of evidence that I  
17 reviewed, that I was able to develop what I feel is  
18 a comprehensive and evidence-based and  
19 fit-for-purpose abatement plan within Lake and  
20 Trumbull Counties.

21 Q. When you met with these individuals,  
22 did you seek to obtain information or did you ask  
23 them to talk to other individuals prior to the call  
24 or Zoom call with you?

25 A. That, I didn't -- I mean, you -- you



1 asked if when I met with them, I asked them to  
2 speak --

3 Q. Yeah, let me back up.

4 A. -- or if they spoke with people  
5 before? I didn't understand the question.

6 Q. When the call was being set up with  
7 them, and they were aware that a call was being  
8 held in a week or however long it was, do you know  
9 if there was a request made of them to obtain  
10 additional insider information, from other specific  
11 individuals at Lake or Trumbull County, so that  
12 they could relay to you information from those  
13 individuals, or was it simply a meeting with them  
14 to understand what they knew based on their  
15 experience and personal knowledge?

16 A. I mean, these calls were one of  
17 dozens, or I suppose, to speak literally, hundreds  
18 of sources of inputs that I used in order to  
19 understand the experience on the ground in these  
20 communities, and including reports such as  
21 community health improvement plans and the HUB  
22 report in Lake County. Reports that have been  
23 generated by the counties, by the types of  
24 individuals that you're speaking about.

25 So at no point in preparing this

1 report did I feel -- did I have concern that I  
2 lacked access to the information that I needed to  
3 develop a comprehensive and evidence-based  
4 abatement plan.

5 Q. Yeah, I don't think that was  
6 responsive to my question at all.

7 My question was whether you know, one  
8 way or the other, whether Lauren Thorp, Kim  
9 Frasier, April Caraway, in preparation for the  
10 meeting or call with you, whether they were asked  
11 to speak to other people so that they could convey  
12 information obtained from those individuals to you  
13 when the meeting was held or the phone call was  
14 held with you.

15 Do you know one way or the other  
16 whether that was asked of them and whether they did  
17 that?

18 A. I'm not aware of whether -- I'm not  
19 aware of the preparatory -- I'm not aware of the  
20 preparation that these individuals performed in  
21 advance of the call that I had with them.

22 Q. Were they asked to -- did they bring  
23 specific documents to the meeting, or provide you  
24 specific documents during the meeting?

25 A. During the -- one of the things that

1 I like to be sure about and used these calls for is  
2 to be sure that I have reviewed the most relevant  
3 documents to the case.

4 And so, typically, I will discuss  
5 with local experts what materials they believe are  
6 most valuable in allowing for me to get as good a  
7 sense as I can of the experience on the ground.

8 MR. MANNIX: We're a little past  
9 10:45, so we can take a break now, and we'll come  
10 back and discuss this and some other things after  
11 that.

12 What do we want to say, right at  
13 11:00?

14 A. That's fine. That's fine.

15 MR. MANNIX: Okay.

16 THE VIDEOGRAPHER: Okay. We're off  
17 the record, 10:48.

18 A. Thank you.

19 (Whereupon, a break was had from  
20 10:48 a.m. until 11:03 a.m. EDT)

21 THE VIDEOGRAPHER: We are back on the  
22 record at 11:03.

23 (Exhibit 10 was marked for  
24 identification.)

25 Q. (BY MR. MANNIX:) Dr. Alexander,

1 we've returned from break. Let me have you turn to  
2 Exhibit 10.

3 A. Okay.

4 Q. Do you have that -- let me know when  
5 you have that in front of you.

6 A. Yes, I do.

7 Q. Okay. This is -- does this appear to  
8 be a report that you prepared in another case, the  
9 case brought by Cabell County and the City of  
10 Huntington in West Virginia?

11 A. Yes, it does.

12 Q. And were you asked to provide  
13 opinions in that case on abatement strategies,  
14 similar to what you were in this case?

15 A. Well, I wasn't asked to focus on any  
16 specific strategies, but I was asked to develop, in  
17 a similar manner, a comprehensive and  
18 evidence-based abatement plan, yes.

19 Q. Did you attempt to conduct an  
20 analysis in that case similar to the analysis you  
21 did in this case?

22 A. Well, the general scientific process  
23 is similar, yes. But there are, you know, big  
24 differences between these communities as well.

25 Q. Understood. But as you said, the

1 scientific process that you undertook was the same,  
2 right?

3 A. Similar. I mean, these are -- these  
4 are dynamic plans. And my information is provided  
5 at a single point in time for each of these  
6 communities. But, yes, the general underlying  
7 process is similar.

8 Q. And you -- in those communities, did  
9 you attempt to understand and then describe the  
10 opioid problem existing in those communities as you  
11 attempted to do so in this case?

12 A. Yes, I did.

13 Q. And you spoke to individuals there,  
14 correct; is that right?

15 A. Yes, I believe I did.

16 Q. If you look at Page 6 of this report,  
17 you've identified stakeholders in those  
18 communities; is that right?

19 A. Yes, that's correct.

20 Q. And I've counted, there's twenty-one  
21 individuals that you identify in those communities.  
22 Does that look approximately correct?  
23 You're free to count them. But I'll  
24 represent to you I've counted them as twenty-one.

25 And really the question I have to you

1 is: Recognizing there's many more people that you  
2 spoke to in those communities than you have in  
3 Trumbull and Lake County as stakeholders and  
4 referenced in your report, is there a reason why  
5 you spoke to only three in Lake and Trumbull and  
6 spoke to twenty-one in West Virginia, in the West  
7 Virginia case?

8 A. Well, these individuals are one of  
9 many sources of information that I used to generate  
10 my report. And so, you know, my typical process is  
11 to speak with people in order to learn as much as I  
12 can and ensure that what I've learned from other  
13 sources is consistent with what I'm hearing from  
14 individuals.

15 Q. Okay. But you spoke to people in  
16 many different departments in West Virginia, while  
17 in this case you spoke to the three individuals you  
18 identified, correct?

19 A. That's correct. The individuals that  
20 I spoke with in this case were individuals that had  
21 a broad view of the landscape and were able to  
22 provide me with valuable information to supplement  
23 the information that I got from other sources.

24 Some of the individuals that I spoke  
25 with in -- in Cabell County in the City of

1     Huntington, while helpful, were able -- provide --  
2     provided me with a much more narrow, you know,  
3     slice of the waterfront, if you will.

4             Q.       With respect to your report,  
5     obviously, there's -- I want to talk a little more  
6     directly about your report, your analysis in Track  
7     3.

8                     You use the word "opioid" throughout,  
9     obviously. So we're on the same page, what is your  
10    meaning? When you use the word "opioid," what is  
11    your understanding? What are you attempting to  
12    convey with that word, with that term?

13            A.       It depends.

14            Q.       Okay. What does it depend on?

15            A.       It depends on the context.

16            Q.       Okay. What do you mean by  
17    "nonprescription opioid"?

18            A.       Typically -- I'm sorry. Go ahead.

19            Q.       No, what does that entail? Go ahead.  
20    You were speaking.

21            A.       Typically, by "nonprescription  
22    opioid," I mean an opioid -- well, it depends on  
23    whether -- I'm sorry, but I want to be sure not to  
24    confuse matters regarding nonmedical use, which is  
25    a separate term that we can discuss, and

1 nonprescription opioid. But by "nonprescription  
2 opioid," typically, I mean opioids such as heroin  
3 or illicit fentanyl.

4 Q. Okay. Well, you reference  
5 "nonmedical use," what do you mean by that term?

6 A. "Nonmedical use"? As with the  
7 standard definitions that are used, you know, in  
8 national service and otherwise generally, I use  
9 that to refer to use of a product for a purpose or  
10 in a way other than for which it's been prescribed.

11 Q. And when you use the term  
12 "prescription opioid," what is meant by that term?

13 A. I believe -- if -- I'd like to look  
14 at my report. I believe, in my report, I discuss  
15 some of these terms and their definitions, so it  
16 would be helpful to refer you -- I'd like to refer  
17 you to that point in my -- that place in my report.

18 Q. Okay. And that -- the report is  
19 right in front of you, so feel free to look at your  
20 report as we go through these questions. You can  
21 do that.

22 A. Okay. So I think, in Footnote A on  
23 Page 3 of my report, I refer to Dr. Anna Lembke's  
24 report for definitions of terms such as "opioid use  
25 disorder," "addiction," "nonopioid medical use and



1 misuse."

2 Q. So you would have to refer to her  
3 report to understand what you mean by those terms?  
4 Is that --

5 A. No, that's -- no, that's not true.

6 Q. Okay. My question was earlier, when  
7 you used the term "prescription opioid," what do  
8 you mean by that?

9 A. It depends on the context.

10 Q. Okay. What does it depend on? What  
11 do you mean "it depends on the context"? What --  
12 what are the different meanings it can have? When  
13 you use it, what are you referring to?

14 A. Can we look at an instance where I  
15 used that term in my report?

16 Q. If you're saying, sir, every time you  
17 use it, it may mean something different? Or do you  
18 have a standard meaning when you use the word  
19 "prescription opioids"? I understand that there  
20 may be something refined, but is there a broad  
21 category or definition that you -- it falls into  
22 when you use the word "prescription opioids" in  
23 your report? Or can we give it no meaning at all?

24 Are you saying that when you use the  
25 word "prescription opioids," it varies -- the

1 meaning of that varies throughout your report?

2 A. Again, it would be helpful to look at  
3 a specific context. If you're asking about how I  
4 intended a specific -- how -- what I intended a  
5 specific word to mean.

6 Q. No. I'm fine with that answer. As I  
7 understand, it varies depending on what sentence,  
8 what page we're referring to. That's fine.

9 When you use the word "opioid use  
10 disorder," what is meant by that term?

11 A. I generally use that synonymously  
12 with opioid addiction. And as I describe in my  
13 report, I provide a reference to the expert report  
14 of Dr. Anna Lembke with respect to definitions of  
15 these terms.

16 Q. Okay. So we should look to her  
17 report if we want to understand your definition of  
18 those terms?

19 A. Well, I think -- I think -- I haven't  
20 matched up every time she uses the word and every  
21 time I use the word. But I think that our reports  
22 and language and use of these terms is well  
23 aligned, because we both practice clinically, and  
24 we both see people with addiction and treat  
25 addiction.

1 (Exhibit 20 was marked for  
2 identification.)

3 Q. (BY MR. MANNIX:) I'm going to have  
4 you turn to Exhibit 20.

5 Do you have that in front of you?  
6 Let me know when you have it in front of you.

7 A. I do.

8 Q. This is -- correct me if I'm wrong.  
9 This is an article that you coauthored; is that  
10 right?

11 A. Yes, it is.

12 Q. Okay. And it was published -- what  
13 year was this published in, 2020; is that right?

14 A. It looks to be, yes.

15 Q. Okay. And do you agree with the  
16 statements in this article?

17 A. Just one minute, please.

18 At the time the article was written,  
19 I believe that the article represents my views and  
20 perspectives on the matters at hand, yes.

21 Q. If you look at the -- down to the  
22 introduction, first page, middle of the page says,  
23 "Introduction." Do you see that?

24 A. Yes, I do.

25 Q. Could you read the first sentence

1 into the record?

2 A. "The overdose crisis in the United  
3 States has typically been described as an opioid  
4 overdose epidemic consisting of three waves, with  
5 morbidity and mortality accounting for -- accounted  
6 for predominantly by prescription opioids, 1999 to  
7 2010; heroin 2010 to 2013; and illicit fentanyl and  
8 other synthetic opioids, 2014 to present."

9 Q. Now, that's -- that was your position  
10 in 2020, correct?

11 A. Yeah. At the time that we submitted  
12 this for publication, it was my position that  
13 the -- that the overdose crisis has typically been  
14 framed as having three waves, yes.

15 Q. Has that position changed? Do you  
16 think differently now? Or do you maintain that  
17 position now?

18 A. Well, I mean, I think it's important  
19 to understand what -- what is and isn't meant by  
20 this. So I'm not suggesting that many people  
21 aren't still dying from prescription opioids. And  
22 I'm not suggesting that nobody died from illicit  
23 opioids in the year 2002.

24 But, yes, I still believe that the  
25 opioid epidemic is typically characterized as

1 having had three waves.

2 Q. As described in the sentence you just  
3 read, correct?

4 A. Yes, that's correct.

5 Q. And then can you read the next  
6 sentence that begins "between" down to the words  
7 "efforts" -- or the word "efforts" in the Footnote  
8 4? Could you read that into the record?

9 A. Sure.

10 "Between 1999 and 2010, the volume of  
11 prescription opioids distributed in the United  
12 States increased four fold, corresponding with an  
13 approximate four fold increase in the rate of fatal  
14 overdoses involving prescription opioids.

15 "Deaths involving prescription  
16 opioids plateaued in 2010 to 2013, rose modestly  
17 until 2016-2017, and declined in 2018 attributable  
18 to both reduced opioid prescribing and other  
19 prevention, treatment and recovery efforts."

20 Q. And is that the statement that you  
21 stand by today, as describing --

22 A. Well --

23 Q. -- on some level, the first wave?

24 A. I'm sorry. I believe I interrupted  
25 you. Can you please ask your question again?

1           Q.       Yeah. I just want to know. You said  
2 this was your view back in 2020, suggesting that  
3 some of your views may have changed. I don't know  
4 if they did or not. I just want to know if you  
5 stand by that statement as generally descriptive of  
6 the first wave of the opioid epidemic?

7           MR. ARNOLD: Objection. Misstates  
8 testimony.

9           A.       Yeah. I'm not speaking here only to  
10 the first wave. And if I were speaking today, as I  
11 am, I would feel compelled to mention the  
12 coronavirus pandemic and that deaths from overdoses  
13 in many communities have never been higher than  
14 they are currently.

15          Q.       Okay. If -- is there something about  
16 this statement that you think is incorrect that you  
17 just read into the record?

18          A.       No.

19          Q.       Is your article incorrect as it  
20 stands today, yes or no?

21          A.       My article or that statement?

22          Q.       That statement.

23          A.       No, I do not believe there's anything  
24 incorrect about that statement.

25          Q.       Okay. And then can you read the next

1 sentence into the record?

2 A. "Beginning in 2010, largely as a  
3 result of increased geographic availability of  
4 historically low cost, high purity heroin and  
5 increased demand for opioids, overdose deaths from  
6 heroin began to rapidly increase."

7 Q. Is there anything incorrect about  
8 that statement?

9 A. Again, I think all of these things  
10 have to be --

11 Q. Is there anything incorrect about  
12 that statement?

13 MR. ARNOLD: Objection. You have to  
14 let him finish his answer.

15 MR. MANNIX: This is not anything  
16 other than a yes-or-no question.

17 MR. ARNOLD: It's not a multiple  
18 choice test. I think he gets to answer the  
19 question.

20 Q. (BY MR. MANNIX:) Is there anything  
21 incorrect about that statement?

22 Go ahead.

23 A. I think these statements have to be  
24 taken into context. And the context of these  
25 statements is understanding the genesis of

1 opioid-related morbidity and mortality.

2 And in the case of this paper, also  
3 understanding nonopioid morbidity and mortality.

4 Q. Dr. Alexander, do you stand by that  
5 statement you just read into the record?

6 A. I think that -- again, I think that  
7 the typical characterization of the opioid epidemic  
8 in three waves is not terribly controversial. But  
9 I think it's important to understand the  
10 interrelationship between the oversupply of  
11 prescription opioids that -- that predominated over  
12 everything else early in the opioid epidemic, and  
13 the subsequent increase in heroin and illicit  
14 fentanyl use that we've seen more recently.

15 Q. You published this in 2020. Are you  
16 now backtracking and taking the position that that  
17 statement you just read into the record is  
18 incorrect? Is that what you're doing?

19 A. I think that there are serious --  
20 serious challenges with heroin and illicit  
21 fentanyl, there's no question.

22 And one important process or part of  
23 understanding those challenges is understanding the  
24 interrelationships of prescription opioid  
25 oversupply on the one hand, and heroin and fentanyl



1 morbidity and mortality on the other.

2 Q. Are you willing to stand by that  
3 statement, as you sit here today?

4 And I'll read it back for the record  
5 if you need me to, but you read it.

6 Do you stand by that statement or  
7 not?

8 A. I think that the increased demand for  
9 opioids, of which the oversupply of prescription  
10 opioids, which was fueled by the oversupply of  
11 prescription opioids, has driven increases in  
12 heroin and illicit fentanyl use.

13 Q. What's incorrect about that  
14 statement?

15 A. I mean, what I'm providing you with  
16 is context for that -- for that statement.

17 Q. I'm not asking you for context. I'm  
18 asking you what's incorrect about that statement?

19 A. I think that statement accurately  
20 reflects one element of the opioid epidemic, which  
21 has been that following the vast oversupply of  
22 prescription opioids and the predominant  
23 prescription opioid deaths early in the opioid  
24 epidemic, we've seen increases in deaths from  
25 heroin and subsequently illicit fentanyl.

1           Q.       Go ahead and read the next sentence  
2       into the record.

3           A.       "Then, in 2013, coincident with the  
4       rapid increase of illicitly-made fentanyl and  
5       fentanyl analogs, including the extremely potent  
6       analog carfentanil in the U.S. drug supply, there  
7       was a near exponential increase in overdose deaths  
8       involving fentanyl and other synthetic opioids,  
9       with the rate of overdose deaths increasing" -- I'm  
10      sorry -- "with the rate of overdose deaths  
11      involving these drugs increasing eight hundred and  
12      ninety percent, from 1.0 per hundred thousand  
13      person in 2013 to 9.9 in 2018."

14          Q.       Is that a correct statement or  
15      incorrect statement, as you sit here today?

16          A.       Again, if I were discussing the waves  
17      of the opioid epidemic today, I would highlight  
18      these three waves. And then I would discuss the  
19      issues with respect to the pandemic and more recent  
20      evidence of greater morbidity and mortality in many  
21      communities than ever before.

22          Q.       Okay. So you can't point out  
23      anything in that particular statement that's  
24      incorrect, you would just add additional  
25      information; is that right?

1           A.       I think that statement accurately  
2 captures some of the challenges of the opioid  
3 epidemic, which include significant morbidity and  
4 mortality from illicit fentanyl.

5           Q.       Have you prescribed opioids in your  
6 practice?

7           A.       Yes, I have.

8           Q.       When you have written a prescription  
9 for any drug, do you expect a pharmacy to fill it?

10          A.       No, I do not. Not necessarily.

11          Q.       If the pharmacy calls and you confirm  
12 that the prescription was intended for the patient,  
13 do you expect it to be filled?

14                   MR. ARNOLD: Objection, form.

15          A.       Not necessarily.

16          Q.       (BY MR. MANNIX:) If pills are later  
17 stolen from the patient after it's dispensed, the  
18 patient -- an opioid prescription that you've  
19 written and was dispensed, do you consider that to  
20 be your fault?

21                   MR. ARNOLD: Objection, form.

22          A.       I mean, there are -- I would  
23 certainly be interested and concerned and do  
24 anything and -- I mean, do everything within my  
25 power to prevent that type of occurrence from

1     happening.

2             Q.       (BY MR. MANNIX:)   So it's possible  
3     that you would consider it your fault, if you wrote  
4     a prescription for somebody for opioids, believing  
5     that that was the right thing to do based on their  
6     medical history and their condition, it was  
7     dispensed and it was stolen, that could potentially  
8     be your fault as far as --

9             A.       It depends.   It depends.

10            Q.       Has that happened to you, where  
11     you've looked back -- that's happened and you've  
12     said, "That was my fault"?

13                    MR. ARNOLD:   Objection, form.

14            A.       Well, that -- that seems to imply  
15     that it's happened.

16                    Can you ask the question again?

17            Q.       (BY MR. MANNIX:)   That's what I'm  
18     asking.   Is it a situation where, you know, you  
19     prescribed opioids, it was dispensed, and it was  
20     stolen by somebody else, and you came to the  
21     conclusion that that was your fault?   Has that  
22     happened?

23            A.       No, it has not.

24            Q.       In this case, you were asked to  
25     provide your expert analysis and opinions in this

1 matter, right?

2 A. In which matter?

3 Q. In the matter related to Lake and  
4 Trumbull.

5 Or do you think we're still on West  
6 Virginia?

7 We're talking about Lake and Trumbull  
8 Counties, the litigation in Lake and Trumbull  
9 Counties.

10 Were you asked to provide an expert  
11 analysis and an opinion related to Lake and  
12 Trumbull Counties?

13 MR. ARNOLD: Objection, form.

14 A. I mean, I think I was responding -- I  
15 think "matter" may be a legal term of art, and I  
16 just am not clear on what "this matter" means.

17 But if you're asking whether I was  
18 asked to provide an opinion as to what  
19 scientifically-based comprehensive and coordinated  
20 actions could be taken by Lake and Trumbull  
21 Counties to reduce further harms from the opioid  
22 epidemic in their communities, yes, that's what I  
23 was asked to do, as well as to identify the  
24 specific populations eligible for specific  
25 services.

1           Q.       (BY MR. MANNIX:) So what you just  
2 described there was what you were asked to do and  
3 what you attempted to do, right?

4           A.       Yes. I mean, as I'm speaking, it  
5 occurs to me, I believe there's an Appendix D or E,  
6 there's an additional appendix that speaks to the  
7 use of indicators or flags. And so we can come to  
8 that. But that was an additional request. But I  
9 think those govern sort of the totality of requests  
10 that were made of me.

11                   There were some instances where I was  
12 asked to provide specific estimates of medical  
13 costs. And those are included in my redress report  
14 or redress model.

15                   So I think that captures the totality  
16 of what I was asked to do.

17           Q.       Were you asked to provide your best  
18 judgment about what actions and interventions  
19 should be employed to abate the opioid epidemic in  
20 Lake and Trumbull County?

21           A.       Yes, I was.

22           Q.       What is the goal of the abatement  
23 plan that's included in your report, the summary in  
24 your report in the redress models?

25           A.       I mean, it's to be sure there's never

1 another child that wakes up without her mom or dad  
2 the next day. I mean, it is to reduce the pain and  
3 suffering and heartache that opioids have caused  
4 for so many individuals within these communities.

5 It's to, you know, help ensure that  
6 individuals with chronic pain are well managed and  
7 managed according to best practices.

8 You know, it's to ensure that police  
9 officers and detectives have the resources that  
10 they need to -- to help get people in treatment  
11 that are nonviolent criminal offenders, and to  
12 divert people from the criminal justice to the  
13 treatment system and so on and so forth.

14 I mean, at the end of the day, it's  
15 about improving the lives of the citizens of Lake  
16 and Trumbull County.

17 Q. Is your goal to completely eliminate  
18 the opioid-related injuries, addictions and death  
19 in Lake and Trumbull County?

20 A. I don't have as a goal a specific,  
21 you know, quantitative threshold of zero or two or  
22 fourteen or something with respect to my goal. I  
23 mean, I just told you in broad form my goal, which  
24 is to -- to be sure that no one ever wakes up again  
25 without a parent from a fatal overdose; that

1 individuals in high school or middle school aren't  
2 running into trouble with opioids that have been  
3 oversupplied and that are circulating through --  
4 you know, through schools and after school clubs  
5 and elsewhere and so on and so forth.

6 Q. But you don't have specific numbers  
7 as to what percentage of reduction or what  
8 numerical percentage you would put on that  
9 reduction in Lake and Trumbull County; is that  
10 right?

11 A. I'm sorry. You said I would "put  
12 on," and I guess I don't understand the question.

13 Q. Yeah. That's not a great term. Do  
14 you have an understanding as to the percentage  
15 reduction of opioid problems that would be achieved  
16 if your abatement program would be put in place in  
17 Lake and Trumbull County?

18 A. Yes, I do.

19 Q. And what is that specific reduction?  
20 Percentage?

21 A. I'd like to review my redress models  
22 to point you to that information.

23 Q. Okay. Where are those found in your  
24 redress models?

25 A. Well, let's take Exhibit 3, which is



1 for Lake County.

2 (Exhibit 3 was marked for  
3 identification.)

4 A. And Page 2. And it looks as if it's  
5 cut off. So let's see if it's different for this  
6 one. It's not. So both of these are cut off.

7 So could we get a complete version of  
8 the report, please?

9 Q. (BY MR. MANNIX:) This is the -- what  
10 page is it on Trumbull County?

11 (Exhibit 4 was marked for  
12 identification.)

13 A. Page 2 of either Exhibit 3 or Exhibit  
14 4. But I'd like to be able to see the electronic  
15 version, please.

16 Q. (BY MR. MANNIX:) On Page 3. Let's  
17 do this if we can: I'll come back to that after  
18 lunch and we can address that line of questioning.

19 A. Okay.

20 Q. Put a flag on that. I'll be able to  
21 get those electronically, knowing what pages you're  
22 talking about.

23 A. I mean, I can look it up quickly, if  
24 you'd like, on my computer. But that would require  
25 me to look at a nonformal exhibit, so maybe that's

1 not permitted.

2 Q. Yeah. Let's just -- we'll go through  
3 the process. I think I can bring those up  
4 electronically --

5 A. Okay.

6 Q. -- probably after the break, lunch  
7 break.

8 With respect to the defendants in  
9 this case, do you understand who the defendants are  
10 in this matter?

11 A. I believe I have a broad  
12 understanding.

13 Q. And what is your understanding?

14 A. I believe they are typically  
15 pharmacies or distributors that act as -- in some  
16 capacity as, you know, pharmacies in the supply  
17 chain.

18 Q. Is it your understanding that the  
19 defendants in this case, Track 3, are different  
20 than or do not include all of the defendants that  
21 were involved in the other cases where you provided  
22 expert services as listed in Appendix C of your  
23 report?

24 A. I'm not -- I don't -- setting aside  
25 whether Appendix C was where that information was

1 listed, the answer to your question is yes, it's my  
2 understanding that the defendants in this case may  
3 overlap with, but are not comprehensive of all of  
4 the defendants that have been -- had claims made  
5 against them in the other opioid litigation.

6 Q. Do you understand what types of  
7 defendants or categories -- you said primary -- in  
8 this case pharmacy and distributors.

9 Do you understand that the other  
10 cases involved manufacturers or other types of  
11 entities?

12 A. Yes, I do.

13 Q. And what other type of entities do  
14 you understand those other cases involved included?

15 A. Well, I believe most of the  
16 litigation has focused on cases against  
17 manufacturers, distributors and pharmacies.

18 Q. With the manufacturers that were  
19 involved in those other cases, did you have a  
20 position of whether those entities should be held  
21 responsible for paying for the abatement plans that  
22 you proposed in those cases, those other cases?

23 A. No, I did not.

24 Q. Does your model assume that, in this  
25 case, the retail chain pharmacy defendants are

1 responsible for the abatement costs in Lake and  
2 Trumbull County?

3 A. I wasn't asked to assign  
4 responsibility in my case. I was asked to develop  
5 comprehensive and evidence-based abatement plans.  
6 But I can tell you that, based on my ten to fifteen  
7 years and dozens of analyses of these matters and  
8 close read of the opioid epidemic, I believe that  
9 one important driver of the epidemic has been the  
10 oversupply of prescription opioids within Lake and  
11 Trumbull County.

12 Q. Were you asked to identify any  
13 specific wrongdoing by any of the defendant  
14 pharmacies?

15 A. I was asked to develop an  
16 evidence-based abatement plan. And that didn't  
17 require me to identify wrongdoing by a specific  
18 pharmacy.

19 Q. Are you offering opinions as to who  
20 caused the opioid epidemic and the harms identified  
21 in Lake and Trumbull County?

22 A. Again, I was asked to develop a  
23 comprehensive and evidence-based abatement plan.  
24 And that didn't require me to identify the precise  
25 cause of the opioid epidemic in Lake and Trumbull

1 Counties.

2 Q. And you're not offering an opinion as  
3 to who should pay the costs for your proposed  
4 abatement program in this case; is that correct?

5 A. I was asked to develop an  
6 evidence-based and comprehensive abatement plan,  
7 which is what I did. And that didn't require me to  
8 assign costs to particular parties.

9 Q. Would you agree that your report does  
10 not identify any causal connection between the  
11 defendant pharmacies' conduct and any specific harm  
12 you have identified in your report?

13 A. My recommendations for how to reduce  
14 opioid-related morbidity and mortality didn't  
15 require me to identify causal connections between  
16 specific parties and the harms that have occurred  
17 in Lake and Trumbull Counties.

18 Q. Is your abatement program set up to  
19 address the problems with the opioid epidemic in  
20 Lake and Trumbull County?

21 A. Yes. Yes, it is.

22 Q. Is it set up to address the problems  
23 with prescription opioids that are found in Lake  
24 and Trumbull County?

25 A. Which problems are you referring to?

1           Q.       Well, let me ask it this way: You  
2 talked about the three waves of the opioid epidemic  
3 earlier, correct?

4           A.       Yes.

5           Q.       And I assume the article -- and you  
6 can look at it -- was that a nationally-based  
7 article in your description of the three waves of  
8 the opioid epidemic? It wasn't particular to a  
9 specific community or state; is that right?

10          A.       Correct. It was a systematic review.  
11 But, again, it's not as if when Wave 2 comes along,  
12 Wave 1 is suddenly no longer relevant. I mean,  
13 these are -- I describe, in my report, that there  
14 are still people this -- you know, this very year,  
15 that are dying in Lake and Trumbull County because  
16 of prescription opioids.

17                 So it's not as if -- so I think it's  
18 important to emphasize that the waves refer to  
19 broad classifications of morbidity over time, but  
20 should not be taken to the final story, or that  
21 they -- these waves are mutually exclusive, and  
22 there's no continuing morbidity from -- you know,  
23 that there was no morbidity from heroin before  
24 2010. That's simply not true.

25          Q.       Yeah. I'm not sure how that, in any

1 way, was responsive to my question. The question  
2 was: Would you agree with me your article was  
3 based on a national perspective, as opposed to a  
4 community or state-specific analysis?

5 A. Yes. The article that you're  
6 referencing, I believe, which is Exhibit 20 --

7 Q. 20, uh-huh.

8 A. -- is a systematic review. And so it  
9 provides a broad review of the landscape.

10 Q. All right. Do you agree that the --  
11 understanding your -- how you're qualifying the  
12 description of the three waves, do you understand  
13 that the three waves of the opioid epidemic that  
14 you've described in your article generally evolved  
15 in that fashion in Ohio?

16 A. Well, I would like to refer to my  
17 report. If there's a -- there's a complete section  
18 of my report called "indicia" that speaks  
19 specifically to the morbidity and mortality for  
20 prescription opioids and nonprescription opioids  
21 over time in these communities. So it would be  
22 helpful to review that with you.

23 Q. Yeah. Well, you can refer to your  
24 report. I don't want -- I can read your report. I  
25 don't want you to just reiterate what's in your

1 report. I'm just asking, yes or no -- and you can  
2 refer to your report -- if the opioid epidemic in  
3 Ohio evolved in a three-wave fashion as you  
4 describe in your article?

5 A. I believe that it did. For example,  
6 on Paragraph 21, the first sentence I write, "As  
7 observed nationally and within Ohio, there was  
8 first a rise in prescription opioid-related deaths  
9 in the early 2000s, followed by a rapid increase in  
10 heroin overdose deaths beginning in 2010, and a  
11 sharp increase in fentanyl overdose deaths in  
12 2016."

13 But I go on to talk about the clear  
14 link between the nonmedical use of prescription  
15 opioids, and subsequent heroin or illicit fentanyl  
16 use. And I also go on to say, for example, that  
17 based on Ohio data, that nearly ninety percent of  
18 participants used prescription opioids prior to  
19 initiating heroin.

20 And so --

21 Q. We'll talk about those statements in  
22 a second.

23 What I'm trying to confirm, and I  
24 think you said you agree, that the three waves of  
25 the opioid epidemic were national evolution, and it



1 also generally applied to Ohio.

2 Did -- does that also apply to what  
3 happened in Lake and Trumbull County, that there  
4 generally were -- or was a three-wave evolution of  
5 the opioid epidemic in Lake and Trumbull County?  
6 Would you agree with that?

7 MR. ARNOLD: Objection, form.

8 A. Can you ask the question once more,  
9 please?

10 Q. (BY MR. MANNIX:) Yeah. Do you  
11 generally agree that there's a three-wave evolution  
12 of the opioid epidemic in Lake and Trumbull County,  
13 as there was nationally and there was in Ohio, as  
14 you explained?

15 A. I believe that the broad contours of  
16 the opioid epidemic nationally have played out both  
17 within the state of Ohio, as well as within Lake  
18 and Trumbull Counties.

19 And that includes enormous morbidity  
20 and mortality from prescription opioids, heroin and  
21 illicit fentanyl.

22 Q. Okay. If you look at -- and I know  
23 you referred -- what paragraph of your report were  
24 you referring to, 21?

25 A. Correct.

1           Q.       And I think you spoke about the  
2 sentence that starts, "There's a clear link between  
3 nonmedical use of prescription opioids and  
4 subsequent heroin or illicit fentanyl" --

5                   THE REPORTER: I'm sorry. I couldn't  
6 hear you. "There's a clear link" --

7           Q.       (BY MR. MANNIX:) -- "between  
8 nonmedical use of prescription opioids and  
9 subsequent heroin or illicit fentanyl use as heroin  
10 and fentanyl are close chemical analogs to  
11 prescription opioids."

12                   You stated that, correct, in your  
13 report?

14           A.       Yes. Correct.

15           Q.       Okay. And then you have a citation.  
16                   Well, then you go on further to say,  
17 "Several studies estimate that seventy to eighty  
18 percent of the current heroin users report  
19 nonmedical prescription opioid use prior to  
20 initiating heroin," correct?

21           A.       Yes, that's correct.

22           Q.       And then you cite -- your first  
23 citation there, 76, is to an article written by  
24 Compton, Jones, Baldwin, "The Relationship Between  
25 Nonmedical Prescription-Opioid Use and Heroin Use."

1 It's in The New England Journal of Medicine.

2 That's your citation, correct?

3 A. Yes.

4 (Exhibit 18 was marked for  
5 identification.)

6 Q. (BY MR. MANNIX:) If you would turn  
7 to Exhibit 18. Let me know if that is the article  
8 that you cite.

9 A. Well, I believe I cite two articles  
10 there, but eight --

11 Q. Is this one of the articles you cite?

12 A. Yes, I believe this is one of the two  
13 articles that I cite.

14 Q. Okay. And if you go to the  
15 conclusions of this article, Page 160. It starts  
16 on 154, go to Page 160 of that article where the  
17 conclusions are.

18 Are you at that section?

19 A. Yes.

20 Q. And under "Conclusions" it states,  
21 "Available data indicate that the nonmedical use of  
22 prescription opioids is a strong risk factor for  
23 heroin use. Yet, although the majority of current  
24 heroin users report having used prescription  
25 opioids nonmedically before they initiated heroin

1 use, heroin use among people who used prescription  
2 opioids for nonmedical reasons is rare, and the  
3 transition to heroin use appears to occur at a low  
4 rate."

5 Did I read that correctly?

6 A. Yes.

7 Q. And then it goes on further to state,  
8 "The transition from nonmedical use of prescription  
9 opioid to heroin use appears to be part of the  
10 progression of addiction and a subgroup of  
11 nonmedical users of prescription opioids, primarily  
12 among persons with frequent nonmedical use and  
13 those with prescription opioid abuse or dependence.

14 "Although some authors suggest that  
15 there is association between policy-driven  
16 reductions and the availability of prescription  
17 opioids and increases in the rates of heroin use,  
18 the timing of these shifts, many of which began  
19 before policies were robustly implemented, makes a  
20 causal link unlikely."

21 Did I read that correctly?

22 A. Yes.

23 Q. And then if you look at this article,  
24 on Page 156 there is a -- down about -- the  
25 left-hand column, about three quarters of the way

1 down, it talks about an article written by a  
2 Muhuri.

3 Are you familiar with Dr. Muhuri?

4 A. With the doctor him or herself? How  
5 do you spell the last name?

6 Q. M-U-H-U-R-I. If you don't know,  
7 that's fine.

8 It says, "Similarly, Muhuri, et al.,  
9 found that the incidence of heroin use among people  
10 who reported prior nonmedical use was nineteen  
11 times as high as incidents among persons who  
12 reported no previous nonmedical use."

13 A. I'm sorry. What page are you on?

14 Q. Well, let me -- I am on Page 156.  
15 I'm sorry. I thought you were following along with  
16 me.

17 A. No. I thought you said 157. I may  
18 have misunderstood you.

19 Q. Okay.

20 A. So where on Page 156?

21 Q. If you look down at -- about three  
22 quarters of the way down, there's a footnote,  
23 Footnote 28. Do you see that?

24 A. Oh, I see it. Yes. Yes, I do.

25 Q. And then if you look at -- back to

1 the citations, there's a citation to an article  
2 written by Muhuri --

3 A. Uh-huh.

4 Q. -- I can't pronounce the other, and  
5 Davies, called the "Associations of Nonmedical Pain  
6 Reliever Use and Initiation of Heroin Use in the  
7 United States."

8 (Exhibit 38 was marked for  
9 identification.)

10 Q. (BY MR. MANNIX:) If you could turn  
11 to Exhibit 38. That was in the second package that  
12 came yesterday.

13 Let me know when you have 38.

14 A. Okay.

15 Q. This -- in the Abstract, it states  
16 that, "This study examines the recent trends in the  
17 heroin initiation, including the role of nonmedical  
18 prescription pain reliever use in the heroin trend  
19 among persons age twelve to forty-nine."

20 Do you see that sentence?

21 A. Uh-huh.

22 Q. Second sentence?

23 A. Yes.

24 Q. And in the second-to-last sentence,  
25 it says, "However, the vast majority of nonmedical

1 NMPR users," nonmedical prescription pain reliever  
2 users, "have not progressed to heroin use. Only  
3 3.6 percent of NPR -- NMPR initiates had initiated  
4 heroin use within the five-year period following  
5 first NMPR use."

6 Do you see that? Do you see that  
7 sentence?

8 A. Yes.

9 Q. Okay. So we have the conclusion that  
10 I read earlier from the Compton article stating  
11 that, although some authors suggest, "There is an  
12 association between policy-driven reductions and  
13 the availability of prescription opioids and  
14 increases in the rates of heroin use, the timing of  
15 these shifts, many of which began before policies  
16 were robustly implemented, makes a causal link  
17 unlikely."

18 And then we have this other article  
19 that I just mentioned that shows that this study,  
20 Exhibit 38, "The vast majority of NMPR users have  
21 not progressed to heroin use. Only 3.6 percent of  
22 MPR [sic] initiates have initiated heroin within  
23 the five-year period following first NMPR use."

24 Have you conducted any published  
25 studies that you believe disprove the conclusions

1 in these two articles, The New England Medical  
2 Journal and the other article I referred you to,  
3 Exhibit 38?

4 A. I mean, I'm a little bit -- I had a  
5 little bit of a hard time following. I think I  
6 followed, but -- but, you know --

7 MR. ARNOLD: Sorry. I was muted. I  
8 had an objection to form.

9 Go ahead, Dr. Alexander.

10 A. Okay. I had a little bit of a hard  
11 time following, you know, the things that you were  
12 weaving together.

13 But what I can tell you, first, I  
14 would point out that the Compton piece was  
15 published more than five years ago, I believe. And  
16 the Muhuri piece more than seven years ago. And a  
17 lot has happened since that time.

18 The second point I would make is that  
19 the Compton piece was one of two references to  
20 support an assertion that I made in my report that  
21 I'd be happy to discuss further.

22 Now, specifically, having said that  
23 and having, again, pointed out that I didn't really  
24 understand the nature of your questioning, if  
25 you're asking specifically if I have conducted a



1 study that runs against or refutes something, can  
2 you please tell me the assertion that you're  
3 wondering whether I have refuted through my own  
4 empiric work?

5 Q. (BY MR. MANNIX:) Well, let's take  
6 the Compton report that's stating that there's --  
7 the causal link between prescription opioids and  
8 the increase of heroin use is unlikely. I'm  
9 paraphrasing, but that's from the Compton report.

10 MR. ARNOLD: Objection.

11 A. That's not what the Compton article  
12 asserts. They're not talking about increases in  
13 prescription opioids and subsequent transitions to  
14 heroin. They're talking about the impact of, I  
15 believe -- I mean, let's look at the language  
16 again. But I believe they're talking about the  
17 impact of policy interventions to reduce  
18 prescription opioid oversupply.

19 And what they're speaking to is a  
20 question as to whether policy interventions to  
21 reduce prescription opioid oversupply effectively  
22 push people to heroin.

23 Q. (BY MR. MANNIX:) Right. And they  
24 conclude that the causal link is unlikely. Have  
25 you --

1           A.       In 2000 -- in 2016, so more than five  
2       years ago, they wrote -- they wrote that they  
3       believe that policy-driven reductions in the  
4       availability of prescription opioids --  
5       essentially, that they felt that the evidence to  
6       date, at that point in time, did not strongly  
7       support claims that policy-driven reductions in  
8       prescription opioids were responsible for increases  
9       in the rates of heroin use.

10          Q.       Right. Okay. Do you -- have you  
11       done any studies to take a different position,  
12       disprove that?

13          A.       I've looked at an enormous number of  
14       studies. I cite more than six hundred, I believe,  
15       in my report. And I speak directly in my report --  
16       or I reference studies that my colleagues and I  
17       have done that do examine this interrelationship of  
18       prescription opioid and heroin morbidity and  
19       mortality.

20          Q.       Okay. And what citations, that you  
21       have conducted, can you point me to exactly what  
22       citations you are referring to, that you have  
23       performed or been a part of?

24          A.       Yes. Please give me one minute to  
25       review my report.

1 (Pause.)

2 A. So Reference 27 in my report is to a  
3 paper entitled "Modeling Mitigation Strategies to  
4 Reduce Opioid-Related Morbidity and Mortality in  
5 the U.S." that was published in the JAMA Network.

6 And that -- that is an example of a  
7 study that I have done that builds upon evidence  
8 regarding the interrelationships of prescription  
9 opioid and heroin morbidity and mortality.

10 Q. (BY MR. MANNIX:) Okay. Anything  
11 else? Any other studies that you have performed?

12 A. Well, again, I would have to -- I  
13 don't recall -- I would have to look through the  
14 papers more carefully. While I don't believe that  
15 I've directly modeled these interrelationships, I  
16 believe that other work that I've published has  
17 been predicated upon my understanding -- review and  
18 understanding of the comprehensive literature  
19 examining these important associations.

20 Q. You recognize that Lake and Trumbull  
21 Counties have taken steps to address the opioid  
22 crisis, correct?

23 A. Yes.

24 Q. And do you think that some of the  
25 things that the Lake and Trumbull Counties have

1       been doing have been beneficial?

2               A.       Yes, I do.

3               Q.       Do you think that some of the things  
4       that they've been doing that are beneficial, if  
5       they had started earlier, would have had a positive  
6       impact sooner than what was experienced due to the  
7       fact that they started at a later date?

8                       MR. ARNOLD:  Objection, form.

9               A.       I think the counties have done the  
10       best with what they've had.  And I think there's an  
11       enormous amount of work still to do.  And I hope  
12       that my -- my proposed abatement plan assists them  
13       in this undertaking.

14              Q.       (BY MR. MANNIX:)  And you said "what  
15       they had," right?  What do you mean by what they  
16       had?  Are you talking finances, or are you talking  
17       about individuals, or are you talking personnel?  I  
18       just didn't know when you said "what they had,"  
19       what you were referring to.

20              A.       Well, I believe that there's not a  
21       county in the country that hasn't been impacted in  
22       some way, or that hasn't faced resource constraints  
23       in their efforts to address the opioid epidemic.

24                       And so I believe that Lake and  
25       Trumbull County have done the best with the -- with

1 the resources that they've had and the, you know,  
2 economic resources and human capital that they've  
3 had to address what has been a monumental problem.

4 Q. Have you analyzed the money spent by  
5 Trumbull County -- I'll say Trumbull first --  
6 Trumbull County to address the opioid crisis over  
7 the last five years?

8 A. I was asked to develop an  
9 evidence-based abatement plan, and that didn't  
10 require me to analyze the money spent.

11 Q. So you haven't done that, correct?  
12 You haven't looked at the money spent, correct?

13 A. Again -- again, I was asked to  
14 develop an evidence-based and comprehensive  
15 abatement plan for these communities, and that  
16 didn't require me to do a detailed analysis of the  
17 money spent to date.

18 Q. So do you know what the average  
19 amount of money spent by Trumbull County over the  
20 past five years has been to address the opioid  
21 crisis?

22 A. My plan provides a comprehensive  
23 review of the scientific evidence base. And  
24 developing that plan required me to understand a  
25 lot about what Lake and Trumbull County have done.

1 And I performed a careful qualitative review of  
2 those efforts. But my report wasn't predicated  
3 upon having done a financial audit of the efforts  
4 to date.

5 Q. So you don't know what the average  
6 amount of money is that was spent by Trumbull  
7 County over the last five years, yes or no?

8 A. In preparing my report, I looked at a  
9 large number of materials and worked hard to  
10 understand the activities that Trumbull County has  
11 taken to date. But my report didn't require me to  
12 do a detailed financial audit to understand the  
13 amount of money that Trumbull County has spent to  
14 date.

15 Q. Does the same thing go for Lake  
16 County, that you have not analyzed the money that  
17 was spent by Lake County to address the opioid  
18 crisis over the past five years?

19 A. Well, in preparing my  
20 recommendations, I looked carefully at the  
21 activities that Lake County has conducted to date,  
22 including the development of the community health  
23 improvement plan, the HUB report, the activities of  
24 the ADAMHS Board and the Opioid Task Force.

25 But my abatement plan didn't require

1 me to do a comprehensive audit of the monies that  
2 Lake County has spent to date to address the opioid  
3 epidemic.

4 Q. Well, you were talking earlier about  
5 you thought that Lake and Trumbull County have  
6 done -- I'm paraphrasing, but you use the word have  
7 done a good job based on "what they had." And you  
8 said one of the elements you meant by "what they  
9 had" was their financial resources, right? Said  
10 something along those lines, correct?

11 A. Yes, that's correct.

12 Q. And then -- and what I'm trying to  
13 understand is, do you understand what their  
14 financial resources were? Did you analyze those to  
15 be able to make a statement that what they did was  
16 good based on what they had?

17 A. My review of materials made it  
18 abundantly clear that there have been very serious  
19 resource constraints in both Lake and Trumbull  
20 Counties. I'm not sure there was -- so I don't  
21 have any ambivalence or uncertainty about that  
22 assertion.

23 Q. What is your position that there are  
24 resource constraints based upon? Explain to me  
25 exactly what your conclusions that there was

1 resource constraints on Lake County, first. What  
2 is that based upon?

3 A. It's based upon the totality of my  
4 review of the materials that are in the public  
5 domain, as well as that may have been produced that  
6 are relevant to the case in Lake County, as well as  
7 my, you know, ten to fifteen years of experience  
8 studying the epidemiology of the opioid epidemic,  
9 as well as the experience of communities to address  
10 it.

11 Q. What --

12 A. So --

13 Q. When were you hired -- when did you  
14 first begin looking at the situation in Lake and  
15 Trumbull Counties?

16 A. Well, as a professor and as a student  
17 of the opioid epidemic, I've been examining the  
18 progress that communities have made, as well as the  
19 setbacks that they've incurred, for years.

20 And unfortunately, Ohio has the  
21 dubious distinction of having had some of the  
22 highest morbidity and mortality in the country.

23 And as you may know, Trumbull County  
24 is one of the leading counties in terms of  
25 morbidity and mortality from opioids in the state.



1                   And so, you know, I don't have a  
2     precise date for you, but I would say many, many  
3     years ago.

4                   Q.       What specifically -- your testimony  
5     was, "Upon the totality of my review of materials  
6     that are in the public domain, as well as that may  
7     have been produced that are relevant to the case in  
8     Lake County."

9                   What specifically did you look at  
10    related to Lake County, specific to Lake County,  
11    that you base your position that there was  
12    considerable resource constraints on Lake County  
13    on? What specific materials?

14                  A.       Well, there's not -- there's more  
15    than one source of information. There's not a  
16    single --

17                  Q.       I didn't say a single. I said what  
18    specific, plural, material.

19                  A.       Okay. So one is the discussion that  
20    I had with Kim Frasier and the conversation with  
21    her.

22                  Q.       Okay.

23                  A.       And another is the review of  
24    morbidity and mortality over time, and the presence  
25    of specific programs or lack thereof in the

1 community.

2 Another is my review of the HUB  
3 report that -- and the community health improvement  
4 plan and the information within those reports. And  
5 another is the -- again, the broader context of  
6 these counties, which in one of the hardest-hit  
7 states in the country, have competing demands.

8 I mean, I've spoken with many  
9 individuals over time, in many different contexts,  
10 that have helped me to understand the competing  
11 demands in terms of county budgets.

12 But I was not asked to do a careful  
13 appraisal, line by line, of how many dollars were  
14 spent here and how many dollars were spent there.  
15 That wasn't what I was required to do. I was asked  
16 to develop, looking forward, a comprehensive plan  
17 for how the epidemic could best be abated.

18 Q. In looking at these counties, did you  
19 analyze the state or federal funding that was  
20 available and -- to address the opioid epidemic in  
21 those counties?

22 A. My plan looks forward, but I did not  
23 try -- I was not asked, nor did I net out in a  
24 quantitative sense the current provision of  
25 services in the counties. So I'm aware, for

1 example, that there are -- there may be federal or  
2 state dollars that flow through the county. For  
3 example, naloxone distribution through Project Dawn  
4 may be an example where the county benefits from a  
5 statewide initiative.

6 Recovery Ohio, the governor's task  
7 force, clearly has had some -- a salutorious [sic]  
8 impact or effects or activities at a county level.

9 But I wasn't asked, nor was I  
10 required -- nor did my report require me to net out  
11 or identify the sources of funding -- the  
12 sources -- the current sources of funding for  
13 opioid-related programs.

14 Q. You weren't asked, nor were you  
15 required, nor did you do those things, correct?

16 A. I was asked to develop an abatement  
17 plan, and that didn't require me to disaggregate  
18 the current sources of funding for current  
19 opioid-related programs.

20 Q. Have you analyzed to what extent  
21 Medicare presently pays for opioid-related programs  
22 in Lake or Trumbull Counties?

23 A. I provide evidence-based concrete  
24 steps that these counties can take to abate the  
25 opioid epidemic. This didn't require me to

1 identify or quantify the amount of current  
2 opioid-related activities that are paid for by  
3 Medicare.

4 Q. Have you analyzed which of your  
5 proposed programs, looking into the future, would  
6 be likely covered by Medicare funding?

7 A. My report focuses on the science and  
8 the public health and the implementation of these  
9 programs, but not -- not where ultimate funding for  
10 these initiatives would come from.

11 Q. So you haven't analyzed what state or  
12 federal funding presently pays for or, in the  
13 future, would pay for the programs that you are  
14 proposing; is that correct?

15 A. As it pertains to this case, I've not  
16 analyzed the distribution of funding for specific  
17 evidence-based programs that I suggest the  
18 community consider.

19 Q. You've implemented a five -- or a  
20 fifteen-year model; is that right, for your redress  
21 model?

22 A. Yes. I've proposed an abatement  
23 strategy that would extend over fifteen years.

24 Q. Why did you use a fifteen-year span,  
25 as opposed to less or more years?

1           A.       Well, I'd like -- I would like to  
2 refer to my report, because I speak to that  
3 directly.

4           Q.       Are you looking at your report or  
5 your redress model?

6           A.       My report itself.

7           Q.       Okay.

8           A.       So it's Footnote F in the first  
9 sentence of Paragraph 33. I write that, "This  
10 medium-turn view strikes a balance - it is long  
11 enough to support infrastructure development and  
12 several cycles of planning and evaluation while  
13 avoiding some of the uncertainty entailed in trying  
14 to anticipate the magnitude of sequelae from the  
15 epidemic that may last decades or even  
16 generations."

17          Q.       So if they had -- if Lake or Trumbull  
18 County had brought their case five years ago, would  
19 you have used the same fifteen-year span, or would  
20 you have increased that to twenty years to still  
21 reach 2035?

22                   MR. ARNOLD: Objection to form.

23          A.       I mean, that's a hypothetical  
24 question. I don't think that I can answer that. I  
25 don't know is the answer, what I would suggest.

1                   But I do believe there's some value  
2     in having a proposed plan that's -- again, that  
3     strikes a balance between these -- these competing  
4     tensions or interests that I articulate in Footnote  
5     F.

6                   Q.       (BY MR. MANNIX:) And, again, in  
7     Footnote F, you're focused on the fifteen years as  
8     opposed to the year 2035; is that right?

9                   MR. ARNOLD: Objection to form.

10                  Q.       (BY MR. MANNIX:) In other words,  
11     you're more focused on the reasonableness of  
12     fifteen years, as opposed to drawing it out to the  
13     year -- anything special about the year 2035,  
14     right?

15                  MR. ARNOLD: Objection to the form.

16                  A.       Yeah. In this footnote, I'm speaking  
17     to the duration of the abatement plan and my belief  
18     that an abatement plan needs to be -- needs to  
19     strike a balance in terms of the duration of the  
20     plan itself. Yes, that's correct.

21                  Q.       (BY MR. MANNIX:) Has anything  
22     changed related to the opioid crisis in Trumbull  
23     and Lake County in the last five years that you  
24     believe is of significance?

25                  A.       Yes.

1 Q. What?

2 A. I mean, this is a dynamic process. I  
3 mean, this is -- you know, I mean, among other  
4 things, we've had a global pandemic. And, you  
5 know, deaths in many communities are higher than  
6 ever before.

7 So an enormous amount has changed,  
8 but -- but the principles of abatement and a sound  
9 abatement strategy remain the same.

10 Q. You mentioned the pandemic. And  
11 generally you said that it's a dynamic process.

12 Anything else, over the last five  
13 years, with respect to the opioid crisis in  
14 Trumbull or Lake County that you considered  
15 significant?

16 A. Yes, many -- many factors. Again,  
17 you know, there are a lot of different things in  
18 flux that affect the fabric of the community and  
19 the ultimate -- the ultimate contours of the  
20 epidemic.

21 So the principles of a sound  
22 abatement strategy, I believe, are unchanged. But  
23 among other things, the -- you know, the evidence  
24 base has evolved. Different programs may have been  
25 launched or extended or superseded by other

1 programs and so on and so forth.

2 Q. If you could turn to Page 12 and 13  
3 of your report.

4 A. Okay.

5 Q. On Page 12, and then specifically on  
6 13, you list these four categories of programs,  
7 right?

8 A. Yes.

9 Q. And you have four categories and then  
10 subcategories ranging between four and six under  
11 each category, correct?

12 A. Yes.

13 Q. And then in the following pages --  
14 you're familiar with your report. In the following  
15 pages, you -- I think it's 14 to 67 you acknowledge  
16 that some of these programs that you're addressing,  
17 Lake and Trumbull have implemented some measures  
18 similar to what you've identified; is that right?  
19 Do you recall that?

20 A. Absolutely. Yes.

21 Q. Okay. Are you aware of whether the  
22 pharmacies have implemented any of the programs  
23 that you mentioned in your analysis, in your  
24 abatement framework?

25 A. Which programs? I mean, Section 3-B



1 is criminal justice system. So how could that  
2 apply to a pharmacy? A pharmacy isn't a criminal  
3 justice system.

4 Q. Fair enough. I was just asking of  
5 any. You know, you have these categories.

6 You're very familiar with your  
7 report, right?

8 A. It's -- I mean, there -- it's a long  
9 report, and there are six hundred plus references  
10 in it, but I understand the broad contours of the  
11 report, yes.

12 Q. But the framework of the report,  
13 you're familiar with, right?

14 A. Uh-huh.

15 Q. Okay. And look for sure. But it's a  
16 similar framework that you used in the West  
17 Virginia case?

18 A. Similar. Not identical, but similar,  
19 I believe.

20 Q. You had four categories in the West  
21 Virginia case, and then there's subcategories.  
22 Subcategories are not identical, but similar,  
23 right?

24 A. Yes.

25 Q. I'm just asking, with your knowledge

1 of these programs, your knowledge or framework for  
2 any -- this report and other reports of the  
3 programs that you identified, are you aware of any  
4 programs, that you're recommending, that the  
5 pharmacies have implemented already in Lake and  
6 Trumbull County? Are you aware of any?

7 A. Well, I think, as it applies to this  
8 case, a major opportunity for the pharmacies is  
9 with respect to the institution of measures to  
10 reduce the oversupply, and unnecessary oversupply  
11 of opioids in the supply chain. And I believe that  
12 there's an appendix to my report that discusses in  
13 detail the public health rationale for these  
14 measures.

15 But my development of that appendix  
16 did not require me to evaluate the specific actions  
17 of pharmacies to date. And I would leave it to  
18 Mr. Catizone or other experts to do so.

19 Q. So as you sit here today, you do not  
20 know -- not looking forward, but existing,  
21 preexisting programs by pharmacies as to whether  
22 they do anything that is outlined in your report,  
23 you don't know sitting here today, correct?

24 A. No, that's not correct.

25 Q. Okay. What programs do you know that

1 the pharmacies run that are outlined in your  
2 framework, your abatement framework?

3 A. Well, I reviewed the section of  
4 Mr. Carmen Catizone's report that elucidated or  
5 that outlined what appear to be significant missed  
6 opportunities on the part of pharmacies to  
7 institute safer practices to reduce the oversupply  
8 of prescription opioids in the supply chain.

9 Q. And that was based on Mr. -- or  
10 Catizone's analysis, right?

11 A. Correct.

12 Q. Have you analyzed any existing  
13 programs, personally analyzed any existing programs  
14 within the pharmacies?

15 A. I have some experience. I have  
16 published papers on pharmacy-based interventions,  
17 and I have performed independent scholarship  
18 looking at pharmacy-based interventions.

19 And so I do have some experience in  
20 understanding of the sorts of interventions that  
21 pharmacies could potentially implement in order to  
22 reduce opioid oversupply.

23 Q. I -- my statement was as to existing  
24 programs existing in Lake and Trumbull County  
25 operated by pharmacies, have you analyzed those?

1           A.       My abatement report didn't require me  
2       to analyze and net out existing programs that may  
3       be operational in Lake and Trumbull Counties.

4           Q.       If you look at, for instance, Page 20  
5       of your report. If you look at Paragraph 57. And  
6       you're talking here about patient and public  
7       education, correct?

8           A.       Yes, that's correct.

9           Q.       And you acknowledge, in Paragraph 57,  
10      that Trumbull County has an outreach program  
11      through the ASAP program, right?

12          A.       Yes, that's correct.

13          Q.       What information do you have on the  
14      details of that outreach program?

15                  MR. ARNOLD: Objection, form.

16          Q.       (BY MR. MANNIX:) I mean, other than  
17      what's stated here, you state, "For example, the  
18      Coalition disseminates education materials to  
19      address stigma, provide tools that parents can use  
20      to discuss substance use with their children, and  
21      maintains a directory of treatment and recovery  
22      support within Trumbull County."

23                  Do you see that?

24          A.       Yes, I do.

25          Q.       Other than that, do you have any

1 additional information related to the ASAP outreach  
2 program related to patient and public education?

3 A. Well, I would want to look at the  
4 materials in my report. I mean, I would start with  
5 Reference 188. But there are, you know, six  
6 hundred plus references in my report. And then we  
7 identified another, I don't know, two hundred or  
8 however many in the additional materials that I  
9 consulted, but didn't use directly.

10 So there may well be other materials  
11 that provide more context for the alliance for  
12 substance abuse preventions, outreach efforts  
13 within the community of Trumbull County.

14 Q. All right. And Citation 188 is a  
15 link to the website for the TCMHRB. Okay?

16 As you sit here today, do you have  
17 any knowledge of additional information related to  
18 the ASAP program that you identify in Paragraph 57  
19 of your report?

20 A. Well, as I sit here today, I mean, my  
21 approach in answering your question would be  
22 similar to any other day, which is to look  
23 carefully at the totality of evidence that I have  
24 available.

25 And so, you know, to answer your

1 question, I'd like the opportunity to look at that  
2 reference, as well as other references in my report  
3 that may be relevant to your question.

4 Q. Would you have any knowledge of the  
5 amount of money that was expended by the ASAP  
6 program related to the patient and public outreach  
7 over the last five years? Did you look at that  
8 information?

9 A. Again, what I would say is that I  
10 think the communities have done the best they --  
11 they can with the resources that they've had and  
12 what they have had.

13 And my forward-looking abatement plan  
14 was not predicated on or didn't require me to parse  
15 out line by line the amount of dollars spent for  
16 specific programs and services in the community.

17 Q. Did you attempt, in any way, to  
18 analyze the effectiveness of that ASAP program in  
19 seeking the goal of patient and public education?

20 A. Well, there's an enormous evidence  
21 base to support the effectiveness, and in many  
22 cases cost effectiveness, of the types of  
23 interventions that I propose.

24 So I didn't do a retrospective  
25 evaluation of the impact of any specific program in

1 the community. But I can assure you that there is  
2 not a lot of disagreement in public health and  
3 public policy about the effectiveness of the types  
4 of interventions that I propose in my abatement  
5 plan.

6 Q. Is it your opinion that the existing  
7 program, this ASAP program in Lake County -- or  
8 excuse me, in Trumbull County, related to patient  
9 and public education, was not sufficient to  
10 accomplish the goals of your plan as it relates to  
11 patient and public education?

12 A. Well, I haven't done a line-by-line  
13 retrospective on the spending or resources that  
14 were committed to one particular plan, or one  
15 particular program or another, because that wasn't  
16 required for me to develop my abatement program,  
17 which is a forward-looking program to prevent  
18 further harms from accruing in these communities.

19 Q. And I wasn't asking for spending or  
20 resource retrospective. I was talking about  
21 performance or effectiveness of the program.

22 Does your answer remain the same, or  
23 did you do an analysis of the effectiveness and  
24 performance of the existing program to compare to  
25 what you're proposing?

1           A.       What I do is discuss a large number  
2 of complimentary interventions, and I leave it  
3 to -- that are evidence-based. And I leave it to  
4 the communities to ultimately determine the plan,  
5 the mix of services and programs.

6                   And part of that process, at a  
7 community level, will be deciding what already is  
8 adequately resourced within the community and what  
9 isn't.

10                   So that's something that the  
11 community would decide, not me.

12                   MR. MANNIX: I think it's 12:30  
13 exactly. I think that's when we said we'd take our  
14 break, so why don't we do that. Plan on 1:15  
15 coming back?

16           A.       That's fine. Or 1:00, if you prefer  
17 and others prefer. Either way would be fine.

18                   MR. MANNIX: Yeah. Let's shoot for  
19 definitely 1:15. My experience is thirty minutes  
20 is always -- it's a little longer than that. So  
21 somewhere in that thirty or forty-five minutes.  
22 But we'll do 1:15.

23           A.       1:15 it is. Thank you so much.

24                   THE VIDEOGRAPHER: Off the record,  
25 12:31.



1 (Whereupon, a lunch break was had  
2 from 12:31 p.m. until 1:17 p.m. EDT)  
3 THE VIDEOGRAPHER: We are back on the  
4 record at 1:17.

5 Q. (BY MR. MANNIX:) Dr. Alexander, we  
6 are back from lunch.

7 You may presently be muted.

8 The -- I want to cover a few things  
9 from this morning that we -- one thing was the --  
10 that you had the ability to pull up those redress  
11 models. I think you were looking at Page 2 or 3.  
12 We were talking about the percentage of reduction  
13 that you were anticipating.

14 MR. MANNIX: I think Lauren from my  
15 office is here.

16 Lauren, can you put that up on the  
17 screen?

18 I just need to check and make sure  
19 Lauren is here.

20 MS. CATANZARITE: I am here. I'm  
21 working on getting them up on the screen for us.

22 MR. MANNIX: Okay. Thank you.

23 MS. CATANZARITE: Paul, do you have a  
24 preference as to whether it's Lake County first or  
25 Trumbull County?

1           Q.       (BY MR. MANNIX:) Doctor, do you have  
2 preference?

3                   MR. MANNIX: I have Lake County up,  
4 so can we go to Lake County?

5                   MS. CATANZARITE: Lake County it is.  
6 Can you see my screen?

7                   MR. MANNIX: I can see it.

8           Q.       (BY MR. MANNIX:) Doctor, can you see  
9 it?

10          A.       I can. I can.

11                  MR. MANNIX: And if you want to  
12 reference anything -- I don't know if you can pull  
13 it up --

14                   You'll have to click on it again,  
15 Lauren.

16          Q.       (BY MR. MANNIX:) Well, point us to  
17 where you're --

18          A.       Yeah. I think Line 24 may have  
19 either not be displayed in full, or it may have  
20 been cut off in the production process. But Line  
21 24 is cut off. And so if you make it wider -- I  
22 don't quite know what happened. But the bottom  
23 line is that -- that I believe that what I project  
24 is that these interventions will reduce the number  
25 of, and there's a missing -- essentially, there's a

1 missing line there.

2 But I believe what it says is that  
3 based -- given that I proposed more comprehensive  
4 coordinated and sustained interventions, I  
5 project --

6 Thank you. There you go.

7 So the bottom line is there --

8 THE REPORTER: I'm sorry. He froze.  
9 I can't hear anything.

10 MR. MANNIX: I can't either so that's  
11 fine.

12 THE REPORTER: Off the record,  
13 Videographer?

14 THE VIDEOGRAPHER: We're off the  
15 record. It's 1:20.

16 (Whereupon, a break was had from 1:20  
17 p.m. until 1:22 p.m. EDT)

18 THE VIDEOGRAPHER: And we are back on  
19 the record at 1:22.

20 Q. (BY MR. MANNIX:) Doctor, when we  
21 lost you, Lauren had expanded so you could see the  
22 full paragraph under "Intervention population."

23 Can you explain what your conclusions  
24 were as to the percentage reduction that you would  
25 expect to see or hope your plan would result in?

1           A.       Yes. I project that the  
2 interventions that I propose will reduce the number  
3 of individuals with opioid use disorder and other  
4 relevant populations by fifty percent over fifteen  
5 years, 15 years. And I use this to scale the  
6 intensity of the different interventions in my  
7 model.

8           Q.       Okay. So what we were discussing  
9 when we were on that line of questioning is the  
10 idea that your expectation is not that it would go  
11 down to zero, the individuals with OUD. There  
12 would still be individuals in Lake and Trumbull  
13 County who had opioid use disorders, correct?

14          A.       Yes. I didn't design a plan that  
15 will necessarily reduce these populations to zero.

16          Q.       And is there a reason why? Is that  
17 not possible to do that? Or why does your model  
18 not attempt to achieve something greater than fifty  
19 percent?

20                   And, ideally, we'd have no one with  
21 that. But go ahead.

22          A.       I apologize for speaking over you.

23                   I think fifty percent reduction would  
24 be an enormous gain. And even one life lost from  
25 the opioid epidemic is one life too many.

1 But there are a lot of countervailing  
2 forces. And if this were easy, these communities  
3 might have been able to have experienced lower  
4 rates of morbidity and mortality thus far.

5 So I think that fifty percent  
6 reduction over fifteen years, again, strikes a good  
7 balance between a bold plan, but one that is  
8 achievable and will improve the quality of life  
9 for, you know, for many residents in these two  
10 counties.

11 Q. We were talking earlier about, you  
12 know, what you were asked to do and what you looked  
13 at. And I understood, you didn't look in full  
14 detail as to the programs that were in place or  
15 analyze them. I think you said that yours was a  
16 prospective program.

17 If -- the one thing I want to  
18 understand, though, is if you haven't looked at a  
19 program that exists in the county, and let's say  
20 the county is operating a program that you are  
21 proposing to the same extent and the full effect  
22 that you would want it to be run and operated, and  
23 it just is not having much success, wouldn't you  
24 want to know that in order to determine whether it  
25 makes sense to include that exact program in your

1 prospective model?

2 MR. ARNOLD: Objection to form.

3 A. I was asked to make recommendations  
4 about what should be done, not quantitatively, what  
5 more should be done above and beyond specific  
6 programs that may be in place.

7 Evaluation is a critical part of what  
8 I'm recommending. And I devote a significant  
9 section of my report to discussing the evaluation  
10 of programs and services. So I'd be happy to  
11 discuss those with you if helpful.

12 Q. (BY MR. MANNIX:) Okay. But my point  
13 being is, wouldn't you need to know, want to know  
14 if -- how successful the program is? I think you  
15 indicated earlier that you didn't evaluate it in  
16 great detail, the successor, the performance of  
17 each and every existing program. And wouldn't you  
18 want to and have to know that in order to determine  
19 whether what you're proposing, if it's identical to  
20 an existing program, is going to be successful or  
21 not?

22 MR. ARNOLD: Objection to form.

23 A. It's not as if my recommendations are  
24 simply to be pasted on and sort of fill holes, you  
25 know, fill potholes that may exist in the

1 community. Rather, what I provide is a  
2 comprehensive suite of evidence-based  
3 interventions.

4 And it's to -- it's for the  
5 communities themselves to examine what they have in  
6 place at the time that this abatement program is  
7 undertaken, and to compare and contrast what I've  
8 recommended with what they have in place.

9 And by all means, the sort of  
10 evaluation that you're talking about will be an  
11 important component of the -- you know, evaluation  
12 of programs is an important component of the sort  
13 of abatement activities that I recommend.

14 Q. (BY MR. MANNIX:) And you're saying  
15 it will be an evaluation. You're expecting the  
16 communities to do that?

17 A. Yes. I discuss, in my report, a  
18 framework for evaluating the effect of different  
19 community-based interventions.

20 MR. MANNIX: Lauren, if you could  
21 pull that off the screen, what's on there now, I'd  
22 appreciate it.

23 But, thank you. I think we're done  
24 with that for now.

25 Q. (BY MR. MANNIX:) We also talked

1 about the fact that you prescribe opioids, you  
2 prescribed opioids in your practice, and we  
3 discussed your expectations as to whether that  
4 would be filled. And I think you indicated -- I  
5 don't have the exact language, but the -- there may  
6 be circumstances where you wouldn't expect a  
7 pharmacy to fill a prescription for opioids that  
8 you wrote.

9 Under what circumstances would you  
10 expect a pharmacist to refuse to fill a  
11 prescription that you wrote?

12 A. There might be, you know, any number  
13 of different situations. A patient might not come  
14 in. A lot of patients don't come in for the first  
15 fill. So patients might not come in to get the  
16 prescription.

17 The out-of-pocket costs may exceed  
18 what the patient is willing to pay, and so it may  
19 be cost prohibitive. The patient's -- a patient's  
20 family member may -- or a patient may come and  
21 discuss with the pharmacist and in -- you know, and  
22 a pharmacist should be making a reasoned judgment  
23 about whether or not filling the prescription is  
24 consistent with best pharmacist practices.

25 Q. Okay. Would you expect a pharmacist



1 to second-guess your medical judgment as to whether  
2 a prescription is appropriate for a certain  
3 individual?

4 MR. ARNOLD: Objection to form.

5 A. Well, a pharmacist has access to  
6 information that I don't have. So I guess I don't  
7 view it quite as maybe defensively as thinking that  
8 it would be second-guessing me, but rather that a  
9 pharmacist is part of the care team and plays an  
10 important role and is privy to data and information  
11 that I may not have that may suggest that the  
12 dispensing of the opioid is actually quite unsafe.

13 Q. (BY MR. MANNIX:) So it would be  
14 other information available, as opposed to trumping  
15 your medical judgment; is that right?

16 A. Again, I -- my model or framework is  
17 not where one person's knowledge trumps another. I  
18 view pharmacists as an important ally in the care  
19 team. And if I was contacted by a pharmacist, I'm  
20 always open ears to hear what they have to suggest.

21 Q. And if you told that pharmacist to  
22 fill the script, based on your medical judgment,  
23 would you expect them to use their own medical  
24 judgment to not fill the script?

25 MR. ARNOLD: Objection to the form.

1           A.       I've never -- I've never encountered  
2       that scenario in more than twenty-five years in  
3       clinical practice.

4           Q.       (BY MR. MANNIX:) We talked about  
5       existing programs in Lake and Trumbull County. And  
6       I just want to make sure I understand your  
7       testimony on a related matter. And that is, there  
8       are existing programs in Ohio that relate to some  
9       of the programs in your abatement framework. Are  
10      you aware of such programs?

11          A.       I'm sorry. I think I missed one  
12      word, but it was an important one. You said there  
13      are existing programs in Ohio that what?

14          Q.       That relate -- I think I said that  
15      relate to.

16          A.       That relate to, yes. Yes, there are.

17          Q.       Did you analyze those from a  
18      standpoint to determine if they would serve the  
19      purpose that your programs are set to serve and,  
20      therefore, the programs that you are proposing  
21      would not be necessary, the Ohio State programs?

22                   MR. ARNOLD: Objection to form.

23          Q.       (BY MR. MANNIX:) Doctor, you can --

24          A.       With all -- I mean, with all due  
25      respect -- and I know that we have discussed

1     this -- I was not asked, nor did I try to just  
2     patch on sort of additional programs on top of what  
3     was being offered in order to create a whole.

4                     What I was asked to do was to develop  
5     a comprehensive abatement program, soup to nuts.  
6     And so all of these questions about sort of, well,  
7     did I consider what was being done, the answer to  
8     all of them is the same in that I did consider  
9     them, and I qualitatively considered them.

10                    But I wasn't ever asked to net out  
11     either quantitatively, financially or otherwise,  
12     specific programs or services.

13                    So, like, if you take naloxone  
14     distribution, the State has Project Dawn, which has  
15     been a very important program at a state level.  
16     But I didn't say, in my report, that naloxone is  
17     less important because the State is doing it.  
18     That's not -- that wasn't my goal. I write about  
19     the importance of naloxone. I do highlight,  
20     though, that Project Dawn has played an important  
21     role, and I discuss that.

22                    So I hope that's helpful in -- you  
23     know, in sort of outlining what I tried to do  
24     versus what I didn't try to do.

25                    Q.     Understood. I think you made that

1 point. Certainly we talked in detail about county  
2 programs primarily in the morning. And I just  
3 wanted to make sure that that approach that you  
4 took applied also to state and federal programs.  
5 And I think the answer is yes; is that right?

6 A. Yes, that's correct. The same  
7 approach and the same -- the same strategy applied,  
8 yes.

9 (Exhibit 2 was marked for  
10 identification.)

11 Q. (BY MR. MANNIX:) I'm going to turn  
12 now -- I know the points you've referred to, the  
13 indicators that are found in the Catizone report,  
14 Appendix F, is what I'm going to refer to. I think  
15 that is -- gosh, I should know this now.

16 Is that Exhibit 2?

17 Yeah. Exhibit 2 of those documents I  
18 provided.

19 A. Okay. I have that in front of me.

20 Q. And Exhibit F -- 2, Appendix F, which  
21 is Exhibit 2, is referenced in your report at  
22 Paragraph 14. I'm going to read this to you. You  
23 can certainly refer to it.

24 Paragraph 14 of your report says, "In  
25 addition to the redress model, I was asked to

1 review the literature on certain potential  
2 indicators of high-risk opioid distribution and  
3 describe their evidence base. See Appendix F."

4 And is that what led you to prepare  
5 Appendix F, what you describe there in Paragraph 14  
6 of your report?

7 A. Yes. Yes, it is.

8 Q. Now, in Appendix F -- let's look at  
9 this twelve-page document, which includes several  
10 pages. About half of that is citations. You speak  
11 of indicators that are identified in the Catizone  
12 report, correct?

13 A. Yes, that's correct.

14 Q. And I think you say -- yeah, about  
15 the fifth line down in your Appendix F, you say, "I  
16 reviewed the portion of Carmen Catizone's expert  
17 report in which he identifies indicators that are  
18 triggered based on information about prescriptions,  
19 patients and prescribers."

20 And it goes on further, but I just --  
21 so you reviewed a portion of his report.

22 Do you know when you reviewed the  
23 portion of his report that you reference there?

24 A. Well, I've reviewed it recently, but  
25 believe that I also reviewed it sometime ago. And

1 I clearly reviewed it before I submitted this  
2 report, because I stated such.

3 So I don't know the exact date,  
4 though.

5 Q. Yeah. And that was not a well-framed  
6 question, because I understand you may have  
7 reviewed it before the deposition.

8 But before preparing your report, you  
9 reviewed a portion of his report, right?

10 A. Correct.

11 Q. And do you know if you assisted  
12 him -- or do you recall assisting him in preparing  
13 the portion of his report that he prepared?

14 A. Well, again, I mean, this feels like  
15 a similar line of questioning as to how I engaged  
16 with Expert Rosen. And the answer is that anytime  
17 I engage with anybody around these matters, my  
18 focus is on the science. And fortunately I'm  
19 encouraged to follow the true north, which is the  
20 science, and I do everything I can to try to  
21 communicate what I know to whoever I'm speaking  
22 with and to try to be of service.

23 So I don't know if that answered your  
24 question, but that's my general approach in  
25 speaking with others about these matters.

1           Q.       All right. The Catizone report  
2 includes a list of what you call "indicators,"  
3 correct?

4           A.       Yes. I believe that it does.

5           Q.       And did you -- is it your  
6 understanding that Dr. -- I don't know if he's a  
7 doctor -- but Carmen Catizone prepared that list of  
8 indicators?

9           A.       Well, ultimately, Mr. Catizone has to  
10 speak for them. I don't know the process that was  
11 used to derive that list. I don't know the details  
12 of the process that was used to derive that list.

13          Q.       Okay. Were you involved in the  
14 development of that list?

15          A.       Again, I have a hard time answering  
16 that question. What I can say is that I shared my  
17 knowledge regarding the evidence base to support  
18 these types of indicators. And, you know, my  
19 report includes seventy-four studies or references.  
20 And -- and many of these are studies that I am --  
21 have significant familiarity with. And so I may  
22 well have discussed these with Mr. Catizone in an  
23 effort to try to be of service.

24          Q.       Okay. But as to whether you had  
25 discussions with him, you attempted to be of

1 service, whether he used that to develop this list  
2 or not, you don't have firsthand knowledge, as you  
3 weren't involved in that particular process of the  
4 development of the list; is that fair?

5 A. That's correct. I'm not aware of the  
6 precise methods that Mr. Catizone used to derive  
7 the list that he has included in his report.

8 Q. Do you -- other than recent dealings  
9 with him, were those all in 2021, you think, or did  
10 you have communications with him before that?

11 A. I think it's likely I spoke with him  
12 during 2020, as well as 2021.

13 Q. The end of 2020 you think?

14 A. Well, I doubt it was the first half,  
15 but it could have been Quarter 3.

16 Q. Got it.

17 Prior to having discussions with him  
18 in the third quarter of 2020 and 2021, did you have  
19 any dealings with Mr. Catizone before that?

20 A. Well, just to be clear, I don't know  
21 precisely when these discussions took place, so I'm  
22 sorry if I misconstrued that they definitely took  
23 place during the third quarter of 2020.

24 But if you're asking whether I spoke  
25 with him or interacted with him prior to this case,



1 the answer is, no, I have not, to my knowledge or  
2 recollection.

3 Q. And that's what I was asking.  
4 Thanks.

5 Your interactions with him, was that  
6 done in person, via Zoom, conference calls, a  
7 little bit of both?

8 A. Well, again, unfortunately, the  
9 pandemic precluded what may have otherwise been in  
10 a nonpandemic world face-to-face meetings. I do  
11 not recall if we engaged by Zoom or by telephone,  
12 but I do not believe I've ever met Mr. Catizone  
13 face-to-face.

14 Q. Other than what's contained in  
15 Appendix F, did you use information provided by  
16 Mr. Catizone to prepare any other portion of your  
17 report?

18 A. I don't know the answer to that. My  
19 report has, as we've discussed, you know, six  
20 hundred plus references. And then there were  
21 another hundred or two hundred that were  
22 considered, though not directly cited.

23 And so I don't know whether  
24 Mr. Catizone alerted me to or directly provided  
25 materials that may have informed other portions of

1 my report.

2 Q. Are you aware of whether or not  
3 Mr. Catizone prepared a supplemental report since  
4 his April report?

5 A. No, I am not.

6 Q. What is your understanding of  
7 Mr. Catizone's area of expertise?

8 A. Well, I would leave that to him to  
9 describe. But I believe he has significant  
10 experience in understanding the pharmaceutical  
11 supply chain and the -- and methods used to promote  
12 and maximize the safe flow of controlled substances  
13 through the pharmaceutical supply chain.

14 Q. In his report, he identifies himself  
15 as having an expertise in the practice and  
16 regulation of pharmacy.

17 Do you have any reason to dispute  
18 that?

19 A. I wasn't asked to critique  
20 Mr. Catizone, nor any other expert's qualifications  
21 per se. And that's not what I focused on in my  
22 abatement program.

23 Q. All right. So you don't have a  
24 position one way or the other whether he has an  
25 expertise in the practice of regulation of

1 pharmacy -- excuse me, the practice and regulation  
2 of pharmacy?

3 A. Again, my program is focused on  
4 concrete measures that can be employed by these  
5 communities, and didn't require me to closely  
6 evaluate the credentials and professional  
7 experience of, you know, every individual that I  
8 spoke with in order to make the recommendations  
9 that I've made.

10 Q. Well, we're talking about Appendix F,  
11 right, not your abatement framework, in the report  
12 right now?

13 A. Appendix F represents my own beliefs,  
14 and I stand behind it. I'm happy to review any  
15 portion of that appendix with you. But I, at the  
16 time that I submitted, you know, Appendix F, it --  
17 you know, and what -- what I would be happy to  
18 review with you today is my own beliefs, not those  
19 of Mr. Catizone's.

20 Q. Understood.

21 But my question, I was asking about  
22 your understanding of his expertise. And you  
23 indicated earlier that he had developed the list  
24 that you then included in Tab 6 -- or Tab 1, Page 6  
25 of your report.

1           A.       Well, I'd like a minute to review  
2       this, please.

3                       (Pause.)

4           Q.       (BY MR. MANNIX:) Well, yeah. I  
5       don't know if there's a question there, but you can  
6       certainly review. I'm not going to prevent you  
7       from reviewing it.

8                       Let me ask you this: You reviewed a  
9       portion of his report, though, you mention that in  
10      Appendix F, right? Appendix F, Paragraph 1, you  
11      say that you reviewed, "A portion of Carmen  
12      Catizone's expert report in which he identifies  
13      indicators that are triggered based on information  
14      about prescriptions, patients and prescribers, and  
15      which have been recognized by defendants and/or law  
16      enforcement. These indicators are listed in Table  
17      1 below."

18                      So you say he identifies indicators.  
19                      You then list those indicators in  
20      Table 1, right?

21           A.       Yeah. But what I would say is that  
22      there's not a lot of -- I mean, this wasn't a  
23      terribly difficult process in terms of identifying  
24      the types of indicators and the evidence base to  
25      support them that can be used by pharmacies and

1 other actors in the pharmaceutical supply chain.

2 In other words, if I had -- in other  
3 words, it wasn't as if, you know, I had a blank  
4 slate and I said, Mr. Catizone, can you please give  
5 me what you have, and I'm going to pipe it into my  
6 report because I have no idea what to do. Not at  
7 all. I mean, it would be easy.

8 And, in fact, even prior to speaking  
9 to Mr. Catizone, I believe that I had conceived of  
10 and conceptualized these broad categories of  
11 indicators.

12 Q. Okay. So is it your testimony that  
13 you didn't need Mr. Catizone at all in developing  
14 this list?

15 A. No. No, it's my testimony that I was  
16 provided with a list, and that it was highly  
17 consistent with what I may well have identified  
18 using my own independent approach. And there may  
19 have been some slight differences around the edges  
20 in how one or two of these -- I mean, how some of  
21 these were operationalized or precisely defined.

22 But the evidence base is there. I  
23 mean, there's twelve pages of evidence for you in  
24 terms of the rationale for using things like  
25 concomitant drugs.

1                   In other words, I didn't need  
2                   Mr. Catizone to tell me that when a patient fills  
3                   both the benzodiazepine and a prescription opioid,  
4                   they're at much higher risk of potential trouble.

5                   Q.           Okay. Mr. Catizone, as I said  
6                   before, identifies himself as having expertise in  
7                   the practice and regulation of pharmacy.

8                               Do you hold yourself out as an expert  
9                   in the practice and regulation of pharmacy?

10                  A.           I hold myself out as a professor of  
11                  epidemiology and practicing internist with  
12                  extensive experience in the role of pharmacies and  
13                  pharmacists in the pharmaceutical supply chain,  
14                  including how it pertains to the opioid epidemic.

15                  Q.           Okay. And I take it, from that  
16                  answer, you do not hold yourself out as an expert  
17                  in the practice of pharmacy; is that right?

18                  A.           I -- as a practicing internist, I  
19                  prescribe medicines every day, including yesterday  
20                  when I prescribed five or ten different  
21                  prescriptions for patients.

22                               So I -- you know, so I hold myself  
23                  out as someone that has expertise as an  
24                  epidemiologist, and as a practicing internist, in  
25                  the pharmaceutical supply chain.

1           Q.       How many days, during your lifetime,  
2       have you acted and practiced as a pharmacist?

3           A.       I -- my -- my abatement plan didn't  
4       require me to act or practice as a pharmacist in  
5       order to have an understanding of how to abate the  
6       epidemic.

7                       And in this instance, the role of  
8       potential indicators were flagged to identify  
9       potentially problematic pharmaceutical dispensing.

10          Q.       Are you a licensed pharmacist in  
11       Ohio?

12          A.       I practice in the state of Maryland,  
13       not the state of Ohio.

14          Q.       Are you a licensed pharmacist in  
15       Maryland?

16          A.       I'm a practicing internist. So I  
17       prescribe medications on a regular basis, but I'm  
18       not a practicing pharmacist, nor did my expert  
19       report -- nor did my expert report require me to be  
20       such.

21          Q.       If you were in front of the Ohio  
22       Board of Pharmacy and they asked you if you are an  
23       expert in the practice of pharmacy, would you  
24       answer yes or no?

25          A.       I would answer just as I'm answering

1 now, which is to thank them for the question, let  
2 them know that I'm a practicing internist, and that  
3 my field of study is pharmacoepidemiology, which is  
4 the study of the use, safety and effectiveness of  
5 prescription medicines.

6 And as a pharmacoepidemiologist, and  
7 having done this for many, many years, I have  
8 extensive experience in the pharmaceutical supply  
9 chain and how drugs flow through the pharmacy  
10 system.

11 Q. Do you know if holding yourself out  
12 as an expert in the practice of pharmacy in Ohio,  
13 whether that would violate the rules of the Ohio  
14 Board of Pharmacy?

15 MR. ARNOLD: Objection to form.

16 A. I think the term "holding myself out  
17 as" is a little bit counter to how I think about  
18 these matters. The way I think about it is, do I  
19 have experience the field of pharmacy. And the  
20 answer is, yes, I have enormous experience.

21 I have worked closely with  
22 pharmacists for many, many years, I've published  
23 dozen, more than a hundred or probably two hundred  
24 papers focused on prescription drugs.

25 I've carefully studied the actors in



1 the pharmaceutical supply chain. I have experience  
2 having worked on a national PMT committee for a  
3 pharmacy benefits manager. I've done studies of  
4 systems that pharmacies have implemented in an  
5 effort to improve controlled substance prescribing,  
6 and so on and so forth.

7 So that's what I would want someone  
8 to know who was interested in my experience  
9 regarding the practice of pharmacy.

10 Q. All right. Whether we say holding  
11 yourself out or claiming that you were an expert in  
12 the practice of pharmacy, do you believe that that  
13 would be in violation of the Ohio Board of Pharmacy  
14 rules --

15 MR. ARNOLD: Objection to form.

16 Q. (BY MR. MANNIX:) -- an illegal  
17 practice in Ohio of pharmacy?

18 MR. ARNOLD: Objection to form.

19 A. I haven't reviewed the Ohio Board of  
20 Pharmacy. But what I can tell you is that my  
21 experience includes -- I haven't reviewed -- I  
22 mean, what I can tell you is that my experience as  
23 a pharmacoepidemiologist includes years of study of  
24 the use, safety and effectiveness of prescription  
25 medicines.

1                   And doing this type of work at the  
2                   level that I do and for the length of time that  
3                   I've done it requires a complex and nuanced  
4                   understanding of actors in the pharmaceutical  
5                   supply chain. And that includes pharmacists and  
6                   pharmacies.

7                   Q.           (BY MR. MANNIX:) I'm not asking if  
8                   you have experience. You know, experience is one  
9                   thing. In the legal profession, in the court of  
10                  law, an expert is another thing. There's  
11                  experience, there's expert.

12                  Do you hold yourself out as an expert  
13                  in the practice of pharmacy in Ohio?

14                  MR. ARNOLD: Object to the form.  
15                  You've been over this question again and again.  
16                  You've got his answer. You should move on.

17                  MR. MANNIX: I'm not. I really very  
18                  rarely get direct answers to my question, so I'm  
19                  asking that he answers this question.

20                  MR. ARNOLD: I think he answered the  
21                  question.

22                  A.           I think I've answered the question.  
23                  But as it applies to this case, I believe that I  
24                  have the understanding, the requisite understanding  
25                  of the pharmaceutical supply chain in order to make

1 the recommendations and draw the opinions that I've  
2 drawn in my expert report.

3 Q. (BY MR. MANNIX:) Are you -- you  
4 know, I see various things throughout your report.  
5 With respect to pharmacists, do you believe that  
6 you have the expertise -- or what -- let me ask you  
7 this: Do you provide any opinions as to the  
8 standard of care related to pharmacists, in your  
9 report -- standard of care of pharmacists?

10 A. Well, I think the closest I come to  
11 that is probably in Appendix F where I discuss the  
12 variety of opportunities that pharmacists and  
13 pharmacies have to improve the safe dispensing and  
14 distribution of controlled substances.

15 Q. Okay. And that's what I'm focused --  
16 I do want to focus our attention right now on  
17 Appendix F.

18 In Appendix F, do you provide any  
19 opinions on the standard of care of pharmacists?

20 A. What I do in Appendix F is outline  
21 the evidence base, the broad and substantial  
22 evidence base supporting the use of a variety of  
23 flags or indicators of potential high-risk  
24 prescription opioid prescribing, dispensing, you  
25 know, and use and so on.

1           Q.       Did you study, in relation to  
2       Appendix F, and what you've placed in your -- the  
3       contents of Appendix F, did you study the specific  
4       actions of any of the defendant pharmacies and  
5       their pharmacists related to Appendix F?

6           A.       Well, I reviewed Mr. Catizone's  
7       report, and I believe he does so. But the  
8       development of my Appendix F did not require me or  
9       wasn't predicated on having studied the specific  
10      actions of defendants in this case.

11          Q.       Okay. So I just want to break that  
12      down. I understand you looked at his report, and  
13      his report says what it says. And if you reviewed  
14      that, you saw what was in there.

15                 But as far as you personally  
16      investigating studying the actions of the defendant  
17      pharmacies in this case, you know, in Lake and  
18      Trumbull County, as I understand, the answer is you  
19      did not do that; is that correct?

20          A.       To develop my Appendix F, my -- my  
21      development -- you know, in Appendix F, I outline  
22      the evidence base supporting the use of indicators  
23      or flags for high-risk use. And this didn't  
24      require me, nor did I, undertake a study of the  
25      specific actions of specific defendants in this

1 case.

2 Q. So you're not opining in Appendix F,  
3 or anywhere else in your report, that the defendant  
4 pharmacies failed to follow the standard of care in  
5 dispensing opioids; is that fair?

6 A. In my report, I outlined the evidence  
7 base to support a number of different flags or  
8 indicators of high-risk prescription drug  
9 distribution or -- or use. But I did not opine on  
10 the actions of specific defendants with respect to  
11 how they may have failed to adhere to standards of  
12 care.

13 Q. In Appendix F, we talked a little bit  
14 about Paragraph 1. And then Paragraphs 2 through  
15 10 appear to add some more description to the  
16 headings in Tab 1 generally, right?

17 A. I'm sorry. You said the headings in  
18 Tab 1?

19 Q. Yeah. You know, in Paragraph 1 you  
20 say -- you say what you say there. But you say  
21 also, I listed indicators in Tab 1.

22 We look back at Tab 1. We see what  
23 the -- under the column of "Concept," what the  
24 various indicators are, the first one being  
25 "Frequency, dose and duration."

1                   And then we go back to the other  
2     Paragraphs 2 through 10 of Appendix F. You  
3     describe, in Paragraph 2, "Frequency, dose and  
4     duration." And you provide various support for  
5     positions under that category, correct?

6                   MR. ARNOLD: Objection to form.

7                   A.       Yes, that's correct. Table --  
8     Table 1. I was a little thrown off by the use of  
9     the word "tab." But, yes, that's correct. The  
10    sections -- the Paragraphs 2 through 10 correspond  
11    at a high level with -- or 2 through 9 correspond  
12    with the rows in Table 1 in Appendix F.

13                  Q.       (BY MR. MANNIX:) Okay. And  
14    there's -- as you said before, I think there's  
15    seventy-four sources that you cite to throughout  
16    Appendix F, right?

17                  A.       Yes, that's correct.

18                  Q.       And how did you go about finding the  
19    articles that you cite in Appendix F?

20                  A.       Well, I used a process similar to  
21    my -- the process that I used in my main report,  
22    which is outlined in Paragraph 11 and Paragraph 15  
23    of my main report.

24                  Q.       Okay. Are these articles that you  
25    and team members at Monument Analytics sought and

1 identified and cited in your Appendix F?

2 A. Yes, they are. And many of them I  
3 may have been familiar with prior to this  
4 undertaking, but others I probably learned of only  
5 through a refresher or rereview of the evidence  
6 base.

7 Q. Did the -- did anyone from any of the  
8 law firms you're working with in this case, were  
9 they used to help find articles that are cited in  
10 Appendix F?

11 A. I doubt it. I don't remember -- I  
12 don't remember for sure. But, in general, the  
13 firms are not, you know, feeding me articles.  
14 They -- I am -- I am free to find anything that I  
15 like. And I suppose there may have been one or two  
16 articles, or a few articles that were sent to me,  
17 but I don't recall is the bottom line.

18 Q. In reviewing the articles, both the  
19 citations as well as what's in the text of Appendix  
20 F, it appears that many of these articles are  
21 national based studies; is that right?

22 A. I would have to review them with you,  
23 but I would not be surprised if that's the case.

24 Q. And some are more state specific.  
25 I've seen Massachusetts, Maine, Maryland, Arkansas,

1 West Virginia. There might be another one or two  
2 that are referenced as state-specific articles.

3 Do you recall that being the case?

4 MR. ARNOLD: Objection to form.

5 A. I mean, again, we could look through  
6 these. But I think it's plausible that many are  
7 national and some are state.

8 But just to be clear, when something  
9 is, quote/unquote, state specific, that doesn't  
10 mean it's only applicable to that state. It may  
11 mean that it was a study in one state, but it may  
12 be highly applicable, or what we say in the field,  
13 generalizable to many other states.

14 And so the generalizability of an  
15 article is something that I routinely will evaluate  
16 as I consider the use of scientific evidence to  
17 support a scientific assertion that I'm making.

18 Q. (BY MR. MANNIX:) And it's your  
19 recollection that you conducted this  
20 generalizability analysis in preparing Appendix F?

21 A. Always. I mean, in any -- it's just  
22 a part and parcel of good -- good epidemiology.  
23 It's not something that I specifically looked at  
24 seventy-two articles and, you know, categorized for  
25 each one yea or nay. But a routine dimension of



1 the work that I do as a scientist is understanding  
2 and thinking about issues of generalizability.

3 Q. Based on my review, I saw no articles  
4 that were Ohio specific, or certainly not Trumbull  
5 or Lake County specific, that that's where the  
6 studies were done, right?

7 Do you have a different recall or --

8 A. I don't know if that's the case, and  
9 I would have to look at the articles with you. But  
10 I don't think that that undermines the potential  
11 import of my conclusions or recommendations.

12 You know, the -- I mean, as the  
13 citizens of these counties know, there -- you can't  
14 just -- it's not like there's a one-size-fits-all  
15 approach, on the one hand.

16 So clearly the abatement plan needs  
17 to reflect and be of, by and for the community.  
18 We've discussed that.

19 But there's also a good scientific  
20 evidence to support the value of these specific  
21 indicators. And the value of them isn't going to  
22 be conditional on -- you know, on whether you're in  
23 Kansas or whether you're in Kalamazoo.

24 I mean, the -- if you think about  
25 something like the potential risks posed by

1 combining dangerous drugs together, that doesn't  
2 change when you move from San Francisco to Seattle  
3 or from Iowa to, you know, Nebraska. That's an  
4 inherent risk of combining these medicines  
5 together.

6 So I hope that's helpful as you're  
7 thinking about the generalizability of these  
8 studies.

9 Q. In the Paragraph 10 of Appendix F, I  
10 want to talk to you about that a little bit.

11 A. Okay.

12 Q. In -- the first statement says,  
13 "Pharmacies and pharmacists play an important role  
14 in addressing the opioid epidemic, given their  
15 position, within the pharmaceutical supply chain  
16 and face-to-face interactions with the patient."

17 Do you see that?

18 A. Yes, I do.

19 Q. And then can you read the next  
20 sentence, starting, "First and foremost"?

21 A. "First and foremost, pharmacies and  
22 pharmacists should follow up on indicators of  
23 opioid misuse, since they have the authority to  
24 refuse prescription fills or to gather further  
25 information so as to allow for the dispensing of

1 controlled substances under the safest conditions  
2 possible."

3 Q. You indicate there that pharmacists,  
4 under certain circumstances, can refuse to fill  
5 prescriptions; is that right?

6 A. Sure. Absolutely.

7 Q. And do you maintain that you have an  
8 expertise in deciding precisely what circumstances  
9 a pharmacist should fill and when a pharmacist  
10 should refuse a prescription?

11 A. I wasn't asked in my report to opine  
12 on specifically under what circumstances a  
13 pharmacist should fill or refuse a prescription.

14 Q. When you write a prescription for a  
15 patient, is that generally done based on a clinical  
16 examination of a patient?

17 A. It depends.

18 Q. Okay. What circumstances or how do  
19 you go about -- you said you've prescribed opioids  
20 before. Give me the scenarios in which you have  
21 prescribed opioids.

22 And let me clarify that.

23 What are the scenarios which lead you  
24 to do that, not the specifics of a certain patient,  
25 but sometime -- is that sometimes done simply by

1 looking at their medical records?

2 A. No.

3 Q. Okay. Is it sometimes done by simply  
4 examining them?

5 A. No.

6 Q. What are the events or what do you  
7 do, what have you done in the past, that lead you  
8 to prescribe an opioid for a patient?

9 MR. ARNOLD: Object.

10 A. I've got -- I've got to gather the  
11 information that I need to be sure it's the best  
12 choice.

13 Q. (BY MR. MANNIX:) Okay. And how do  
14 you gather that information?

15 A. It depends on the case.

16 Q. Okay. What are some of the things  
17 you do to gather the information?

18 A. I may speak with the patient, I may  
19 evaluate the patient, I may examine the medical  
20 record, I may speak with patient's family members,  
21 I may check the prescription drug monitoring  
22 information for the state, I may speak with other  
23 clinicians, I may consult the medical literature  
24 and clinical decision support software. I mean,  
25 there are a potentially large number of inputs, and

1     it really just depends upon the case.

2             Q.       Is it fair to say you don't expect a  
3     pharmacist to conduct a clinical examination of a  
4     patient when they come to have a script filled at  
5     the pharmacy?

6             A.       Well, I think a pharmacist does have  
7     an obligation to evaluate physical cues that may be  
8     present when engaging with patients. But I suppose  
9     maybe that doesn't qualify as a formal physical  
10    examination. I don't expect a pharmacist to listen  
11    to a patient's lungs with a stethoscope, if that's  
12    what you're asking.

13            Q.       The type of examination that you do  
14    prior to prescribing opioids, you don't expect the  
15    pharmacist to do the same type of examination; is  
16    that fair?

17            A.       Yeah. I think a pharmacist has a  
18    separate and complementary responsibilities that --  
19    and in some cases, overlapping responsibilities  
20    with a prescriber, such as a physician or nurse  
21    practitioner. And so that's what I believe the  
22    pharmacists' responsibilities are.

23            Q.       Do you have an understanding that you  
24    have access to certain records generally of  
25    patients that are not available to a pharmacist?

1           A.       Yes. And the pharmacist has access  
2 to records that are not available to me.

3           Q.       Okay. And what are the documents or  
4 records that you have access to, generally  
5 speaking, that a pharmacist does not have access  
6 to?

7           A.       I don't -- I mean, it depends upon  
8 the pharmacist, the pharmacy and the patient and  
9 the health system. I mean, I just can't answer  
10 that question. I don't know, and my report didn't  
11 require me to know specifically what fraction of  
12 the information that I have is visible to the  
13 pharmacist and vice versa.

14          Q.       So you don't have -- as a practicing  
15 internal MD, you don't have an understanding or an  
16 expectation of what information is available to the  
17 pharmacists that is different from the information  
18 that is available for you, or do you have an  
19 understanding?

20          A.       Well, I think that -- I mean, in this  
21 day and age, there's an awful lot of information  
22 that gets piped around from system to system. And  
23 so that's -- that's one of the reasons why I'm more  
24 cautious in -- in asserting a response here than I  
25 would otherwise be.

1                   For example, I believe, in many  
2                   systems of care, pharmacists actually do have some  
3                   diagnostic information about patients. And that  
4                   may come as a surprise.

5                   So that's why I don't feel like I can  
6                   speak to this in detail. But I want to underscore  
7                   that the preparation of my report, including  
8                   Appendix F, didn't require me to know this  
9                   information.

10                  Q.           You said something there about it  
11                  would come as a surprise. I believe, in many  
12                  systems of care, pharmacists actually do have some  
13                  diagnostic information about patients.

14                  Is it your understanding that  
15                  pharmacists have the same amount of diagnostic  
16                  information that is available generally to you?

17                  A.           So I was asked to develop -- within  
18                  Appendix F, I was asked to develop discussion  
19                  around the evidence base to support potential  
20                  indicators of high-risk opioid distribution.

21                  And that undertaking didn't require  
22                  me to understand the detailed information that  
23                  pharmacists may or may not have that, as a  
24                  practicing clinician, I may or may not have.

25                  Q.           And you don't have that information,

1 the information as to what a pharmacist may or may  
2 not have, as opposed to what you, as a practicing  
3 clinician, may or may not have? You don't know  
4 what that difference is?

5 A. I've told you that I think it  
6 depends, and my guess is that it varies as well.

7 Q. And then you said earlier that that  
8 might come as a surprise.

9 Are you saying that may come as a  
10 surprise to you or to others? Who are you saying  
11 that may come as a surprise to? And I can read the  
12 exact quote, if you want me to go back to it.

13 A. No. Yeah. I think I was speaking to  
14 the fact that, in today's interconnected world,  
15 there is a greater visibility of information across  
16 different organizational structures than  
17 historically has been the case, in the  
18 pharmaceutical supply chain.

19 Q. Okay. And as we talked about before,  
20 you haven't spent any day of your life acting as a  
21 pharmacist, and you don't have an understanding, a  
22 precise understanding what information is available  
23 to them?

24 A. As a pharmacoepidemiologist, I have  
25 spent my career focused on the study of the use and



1 safety and effectiveness of prescription medicines.  
2 And this includes having worked very closely with  
3 pharmacists for many years to understand the  
4 practice of pharmacy, as well as the pharmaceutical  
5 supply chain.

6 Q. Okay. And do you or do you not  
7 understand what a pharmacist -- what information  
8 they have available to them?

9 A. I've told you I think it depends and  
10 it's highly variable.

11 Q. In the next sentence of Paragraph 10,  
12 you state that, "Pharmacies, and particularly  
13 pharmacists, are also ideal points for patient  
14 education and outreach on the risks of overdose and  
15 to implement programs for screening and referrals  
16 to OUD treatment."

17 Do you see that?

18 A. Yes, I do.

19 Q. And then you cite, I think, one  
20 article there, correct, article -- Footnote 67?

21 A. Well, the prior assertion in the same  
22 sentence cites a different reference, Reference 66.

23 Q. Oh, you're right. It's the same  
24 sentence.

25 So you cite those two articles for

1       that proposition; is that right?

2               A.       Yes, that's correct.

3               Q.       And then you go on further to state,  
4       "Pharmacies are also well-positioned to implement  
5       drug disposal or deactivation packets for  
6       individuals filling prescriptions for controlled  
7       substances (See also Section 1C of Expert Report),  
8       as well as harm reduction initiatives such as  
9       naloxone prescribing and dispensing."

10              Do you see that?

11             A.       Yes.

12             Q.       And you have -- you have four  
13       articles cited there, correct?

14             A.       Well, again, if you include the first  
15       part of the sentence, there are a total of five  
16       articles. But, yes, I see those.

17             Q.       Perfect. Okay.

18                     I think we've talked about before,  
19       you have not assessed whether or not the pharmacy  
20       defendants have implemented these -- any of these  
21       types of programs in Lake and Trumbull County; is  
22       that right?

23             A.       My report and what I was asked to do  
24       didn't require me to evaluate whether or not the  
25       defendants have implemented specific programs in

1 Lake and Trumbull County thus far.

2 Q. And then the last sentence here says,  
3 "However, pharmacists report that time constraints  
4 that result from organizational policies, such as  
5 those that arise from insufficient staffing or time  
6 requirements for filling a prescription, hinder  
7 their review of concerning patient behavior or  
8 prescribing practices."

9 Do you see that?

10 A. Yes, I do.

11 Q. And that's based on -- I'm going to  
12 get this one correct. I'm going to look at the  
13 rest of the sentence, not just the last -- you cite  
14 two articles there, right?

15 A. Correct.

16 Q. And -- all right. And these are  
17 not -- and these were articles that studies were  
18 done, correct?

19 A. Yes, I believe that's correct.  
20 Although I would want to review them specifically  
21 in more detail in order to provide a definitive  
22 answer to that question.

23 Q. And you were not involved in those  
24 studies, were you?

25 And you didn't conduct the interviews

1 or anything of that nature; is that fair?

2 A. Yes. I was not involved in the  
3 studies referenced in Reference 73 or 74 in  
4 Appendix F.

5 Q. And I reviewed these two articles.  
6 One is from, I think, five Canadians who write  
7 about pharmacy practice in Canada. And the other  
8 is from an Oregon story -- Oregon study.

9 Are you familiar with those articles,  
10 as you sit here today?

11 A. Again, I would want to review them  
12 more carefully if you have specific questions about  
13 them. But I included them because I felt that they  
14 supported the general assertion that I was making.

15 Q. In my review of those articles, they  
16 don't discuss any specific conduct particularly  
17 related to the defendants in this case.

18 Do you have any reason to dispute  
19 that?

20 A. Well, we've discussed the issue of  
21 generalizability before. And I would just say,  
22 again, for the record, that -- that a study can be  
23 conducted in one setting, and be highly  
24 generalizable and relevant to another setting. So  
25 it's an important matter and one that I considered

1 when developing my recommendations.

2 MR. ARNOLD: Paul, I'll just mention,  
3 since there's a moment of silence --

4 MR. MANNIX: Yeah. That's good.  
5 It's a good time to take a break.

6 MR. ARNOLD: Yeah.

7 A. May I ask what the total video time  
8 is on the record thus far?

9 THE VIDEOGRAPHER: Yeah. I'm going  
10 to have to add that up.

11 MR. ARNOLD: Why don't we go off the  
12 record.

13 THE VIDEOGRAPHER: Okay. Let's go  
14 off the record at 2:19.

15 A. Take your time.

16 (Whereupon, a break was had from 2:19  
17 p.m. until 2:37 p.m. EDT)

18 THE VIDEOGRAPHER: We are back on the  
19 record at 2:37.

20 Q. (BY MR. MANNIX:) Dr. Alexander, we  
21 were talking about Appendix F, and I have a couple  
22 of final questions related to that.

23 We were talking about the information  
24 that you have and the pharmacist has. And I think,  
25 at one point, you said a pharmacist often has

1 information you don't have.

2 What are -- what's an example -- or  
3 what -- not just an example, but what information  
4 do you understand a pharmacist has access to that  
5 you don't have access to for a particular patient?

6 MR. ARNOLD: Objection to form.

7 A. I believe pharmacists typically will  
8 have information regarding the -- a patient's fill  
9 history, you know, within a given pharmacy or  
10 pharmacy chain. And these days may well have  
11 information about the broader use, the broader fill  
12 history for a patient beyond the pharmacy in  
13 question.

14 Q. (BY MR. MANNIX:) Now, in preparing  
15 Appendix F, we were talking about the defendants'  
16 conduct. And I think you indicated that you did  
17 not -- you weren't asked to and weren't required  
18 to, in order to prepare Appendix F, study the exact  
19 practices of each pharmacy defendant.

20 Did you, in any way, review the  
21 written policies related to dispensing of any of  
22 the pharmacies in preparing Appendix F, or any  
23 other part of your report?

24 A. I have broad familiarity with some of  
25 the policies that pharmacies have put in place in

1 an effort to try to improve the safe distribution  
2 of pharmaceuticals. But I didn't -- but the  
3 preparation of my report didn't require me to look  
4 at the defendants' policies in this particular  
5 instance.

6 Q. So you don't have an opinion as to  
7 whether or not their policies need to change or not  
8 in connection with their dispensing -- and your  
9 position is Appendix F -- considering you haven't  
10 reviewed their policies; is that fair?

11 A. Well, I think Mr. Catizone's report  
12 highlights many opportunities for improved, safe  
13 dispensing and distribution of pharmaceuticals.  
14 And so I -- and I did review those as part of my  
15 preparation for -- as part of the materials that I  
16 reviewed in developing my own opinions.

17 But my report focuses on the evidence  
18 base to support these indicators, rather than their  
19 institution, or lack thereof, by the defendants in  
20 question.

21 Q. Would you agree that it is not the  
22 goal of your opinions in your report, including  
23 Appendix F, to have a specific impact on the  
24 dispensing patterns that exist?

25 A. Based on the totality of evidence

1 I've reviewed, I believe there are enormous  
2 opportunities for pharmacies to improve the safe  
3 distribution of controlled substances, such as  
4 opioids, in the supply chain.

5 Q. And that's a totality for pharmacies  
6 in general, not -- you haven't looked at the  
7 specific conduct of these defendants; is that  
8 right?

9 A. That's correct.

10 Q. If you look at -- I want to review  
11 with you some of the information in your redress  
12 models. So let's go to what I've marked as Exhibit  
13 3.

14 I think we'll be able --

15 MR. MANNIX: Lauren, are you able to  
16 pull that up onto Exhibit Share?

17 A. I'm comfortable without doing so, as  
18 long as it's something that I can find.

19 Q. (BY MR. MANNIX:) Okay. All right.  
20 Let's see if we can go without it. And then, if we  
21 need to, we will.

22 MS. CATANZARITE: Exhibit 3 is  
23 currently on Exhibit Share. But if you want me to,  
24 I can share my screen.

25 MR. MANNIX: Yeah. We'll see if we



1 need that if there's one tab that's hard to read,  
2 or not all the information is included.

3 MS. CATANZARITE: Sure.

4 Q. (BY MR. MANNIX:) If you look -- and  
5 we're going to discuss on Lake County as an  
6 example.

7 If you look, Doctor, at 1D of your  
8 redress model for Lake County. You indicate  
9 here -- why don't you explain what this  
10 generally -- this program or this topic, what this  
11 is meant to achieve. "Achieve" is the wrong word.  
12 What do you see as being the services provided  
13 under this category?

14 A. Sure. So this category -- and  
15 there's a section of my report, to be clear, that  
16 describes this in more detail.

17 Q. Right. I think for all of these,  
18 right?

19 A. That's right. That's right. So, you  
20 know, if you'd like that detail, I think we should  
21 look at my report for that information.

22 But the broad idea here is to help  
23 promote what we call primary prevention. In other  
24 words, preventing new individuals from developing  
25 opioid use disorder, nonmedical opioid use and the

1     like, through the support of -- through the support  
2     of community coalitions and community-based  
3     organizations.

4             Q.       Okay. You indicate under Number 3,  
5     "Total number of community spaces." And for each  
6     year of the fifteen years of the model, it's 1.0,  
7     correct?

8             A.       Yes.

9             Q.       What does that represent, that number  
10    and -- go ahead.

11            A.       Well, for any given input to these, I  
12    describe the source or the rationale further down  
13    the page. So in this instance, I write, "I assume  
14    one community physical space to host forums,  
15    seminars, training sessions and community  
16    meetings."

17            Q.       Now, is that your assumption that  
18    that is an existing space or a new -- an existing  
19    community space or a new community space?

20            A.       This is the same question that we  
21    have, you know -- I mean, it's a similar question  
22    to what we've discussed many times today, which is  
23    that my report didn't require me to net out  
24    specific services or programs quantitatively.

25                    So I didn't require me to determine

1 whether or not there's currently a brick and mortar  
2 space or whether a new brick and mortar space needs  
3 to be provided.

4 Q. Okay. So you didn't look into that  
5 issue because it didn't matter to you, correct?

6 A. It wasn't what I was asked to do. It  
7 is not that I'm not -- it's not that I'm  
8 disinterested or wouldn't be -- you know, I'm very  
9 interested. But it's not -- was not required for  
10 me to make the recommendations that I made.

11 Q. Okay. And I'm not suggesting that  
12 you don't -- are not a caring person. But as far  
13 as your analysis goes, it wasn't critical for you  
14 to know that; is that right?

15 A. Correct.

16 Q. And then if you go to 2A, it talks  
17 about "Connecting Individuals to Care."

18 You see that?

19 A. Yes, I do.

20 Q. And then you have various numbers.  
21 And then you have the footnotes below or the notes  
22 below.

23 Under Number 4 to the notes, it says,  
24 "One voucher per week, fifty-two weeks."

25 Do you see that?

1 Did you say "yes," Doctor? I was  
2 looking down.

3 A. No. I'm looking.

4 Q. Okay. And that relates to total  
5 number of transportation vouchers needed for  
6 patients receiving outpatients OUD treatment per  
7 year. You see that?

8 A. Yes, I do.

9 Q. In that -- for the outpatient  
10 treatment, what percentage of the participants are  
11 you assuming will require travel vouchers?

12 A. I estimate here the -- well, I guess  
13 I'd like to look at this. I guess it would be  
14 helpful to see a little bit -- I'm changing my mind  
15 and would like to see it projected, if that's okay,  
16 because this is small.

17 Q. Yeah.

18 A. And I'd like to be sure that I give  
19 you the information that you seek.

20 Q. Yeah, that's fine.

21 MR. MANNIX: Lauren, can you bring  
22 that up, then?

23 MS. CATANZARITE: You should see my  
24 screen.

25 MR. MANNIX: Yeah, we -- I do.

1                   And then we're looking at Note 4. So  
2                   you might have to drag that down a little bit.

3                   Or is that it? That might be it.

4                   MS. CATANZARITE: Can everyone see --

5                   A.       Yeah. That's much better. That's  
6                   helpful. So -- although that's -- is that the  
7                   right -- yeah, okay. So Tab 2A. Yeah.

8                   So you asked sort of about this --  
9                   you asked the number of patients that I assumed  
10                  would need transportation vouchers. And I think  
11                  it's all patients that are receiving outpatient  
12                  care.

13                  Q.       (BY MR. MANNIX:) Okay. And I think  
14                  my question was the percentage. But you're saying  
15                  a hundred percent of the people --

16                  A.       Correct. Correct.

17                  Q.       -- is your assumption?

18                  What is that based upon that you  
19                  assume that a hundred percent of the participants  
20                  would need vouchers?

21                  A.       Well, I provide a reference -- I  
22                  provide a reference for that in -- I don't know  
23                  what row it is, but it's -- well, one voucher per  
24                  week. So it's Row 44 here, the center for  
25                  substance abuse treatment, substance abuse

1 administrative issues and outpatient treatment,  
2 treatment improvement protocol series is the basis  
3 for that recommendation.

4 Q. Okay. Is that specific to Lake and  
5 Trumbull County --

6 A. I don't believe -- I don't believe  
7 that it is. But, again, as with all of the inputs  
8 and sources of information, I considered issues of  
9 relevance to Lake and Trumbull County as I make my  
10 recommendations.

11 Q. Okay. But you didn't analyze  
12 whether -- presently, what percentage of people in  
13 outpatient treatment in Lake and Trumbull County  
14 actually need this form of transportation; is that  
15 fair?

16 A. My recommendations didn't require for  
17 me to do a detailed audit of the number of  
18 individuals within the county that -- that  
19 currently have adequate transportation or not for  
20 addiction treatment.

21 Q. Okay. And then the -- it also  
22 appears -- correct me if I am wrong -- that --  
23 well, it says fifty-two weeks. That's every week  
24 of the year.

25 So you're assuming that if each

1 person in outpatient treatment would treat for  
2 fifty-two weeks out of the year, the full year; is  
3 that right?

4 A. Correct. I mean, these may not be  
5 the same precise individual, but I'm assuming that  
6 the demand would be -- that there would be  
7 sufficient resources to provide for transportation  
8 of at least one voucher per week for each  
9 individual in outpatient care.

10 So you can think of it as like a sort  
11 of -- a bed being occupied, or an outpatient slot  
12 being occupied. But it may or may not be by the  
13 one continuous patient for an entire year.

14 Q. And then the next, go down two  
15 columns to Note 6, which, if you go up at top,  
16 relates to the total number of transportation  
17 vouchers needed for patients receiving intensive  
18 outpatient OUD treatment per year.

19 And then Note 6 says, "Four vouchers  
20 per week for fifty-two weeks."

21 So once again, that's every week out  
22 of the year.

23 What is that based on? The same  
24 rationale that you just explained with the  
25 outpatient treatment?

1           A.       Well, I would want to look carefully  
2       to see whether or not the reference is the same.  
3       Keep in mind that I had, you know, hundreds of  
4       references that I relied on in my report.

5                       But the general intuition is that  
6       transportation is an important barrier to  
7       treatment; that intensive outpatient treatment is,  
8       by definition, more frequent and more intensive  
9       than just standard outpatient treatment, and  
10      that -- that for these slots that would be filled,  
11      that -- that whether or not it's one person  
12      continuously or not getting treatment, that they  
13      would be provided with transportation assistance  
14      and that those treatment slots would be filled  
15      throughout the year.

16           Q.       Turn to the next page, 2B, which is  
17      "Treatment for Opioid Use Disorder."

18                       Do you see that? I guess it's on the  
19      screen.

20                       But if you look at the proportion of  
21      individuals with OUD to receive treatment, and  
22      there's some numbers from 2021 to 2035. And down  
23      in the note it explains the assumptions of that  
24      yearly estimate from forty percent in Year 1 to  
25      sixty percent in Year 15, correct?



1           A.       Correct.

2           Q.       And then you provide more information  
3 about that, explain it was based on 2018 treatment  
4 episode data, TEDS, right?

5           A.       Yes.

6           Q.       And approximately twenty to thirty  
7 percent of individuals with OUD were in treatment  
8 at some point in the past twelve months nationally.

9                   And then you identified the World  
10 Health recommendation of -- a recommended forty  
11 percent minimum target.

12                   What is that based upon that, with  
13 those numbers, the twenty to thirty percent of  
14 individuals from the TEDS source, and then forty  
15 percent minimum from World Health Organization, you  
16 make the assumption of forty percent in Year 1 to  
17 sixty percent in Year 15?

18                   How did you jump to those numbers?

19                   MR. ARNOLD: Objection to form.

20           A.       Well, I mean, listen, we -- it's -- I  
21 mean, it's a bit surprising or shocking, frankly,  
22 to talk about settling for anything less than  
23 everybody getting treated. I mean, imagine if I  
24 told you that our target for colon cancer is that,  
25 you know, rest assured, Mr. Mannix, we're going

1 to -- we're going to guarantee that we reach forty  
2 percent of people with colon cancer, and they're  
3 going to get high quality care next year.

4 So these are -- unfortunately,  
5 they're -- they're -- you know, they're pragmatic,  
6 they're in some sense conservative, and yet they're  
7 also ambitious estimates all at the same time.

8 In other words, I believe that we can  
9 achieve forty percent. That would be a great  
10 improvement over what has taken place in many  
11 communities around the country. But it's far too  
12 little. And sixty percent is much better.

13 But, again, if I told you, you know,  
14 fear not, you know, we're going to be sure that  
15 sixty percent of people with multiple sclerosis  
16 have access to FDA-approved evidence-based  
17 treatments, there would be global outrage.

18 And yet -- you know, yet we're  
19 swimming upstream in many cases because of the --  
20 because of the, you know, historic challenges,  
21 including resource constraints, in building out the  
22 infrastructure that we need.

23 So I believe that a forty percent  
24 target up to a sixty percent target over fifteen  
25 years is achievable. And I estimate that, along

1 with the other recommendations that I make, we can  
2 reduce morbidity and mortality by fifty percent or  
3 more over fifteen years.

4 Q. (BY MR. MANNIX:) Understanding that  
5 that's the numbers you are seeking to achieve, is  
6 there any basis for those particular numbers, as  
7 opposed to other numbers more or less than those  
8 numbers?

9 A. Well, what -- what numbers would you  
10 be proposing? I mean, I'm --

11 Q. You -- I'm not proposing numbers.  
12 You proposed numbers, and I want to understand the  
13 basis for those numbers is all.

14 A. Yeah. Yeah. Sure. Sure. The  
15 numbers are based on my review of the totality of  
16 evidence, and my review of models, modeling  
17 different impacts, and my review of many different  
18 abatement programs in cities and counties and  
19 states around the country.

20 And so the numbers represent the --  
21 my best evidence, as I sit here today, regarding  
22 what we should be targeting in these communities.

23 Q. If you look at Note 4 -- let's see if  
24 that needs expanded. You know, once again, you  
25 have TEDS data, 24.5 percent, and then you have

1     yearly estimate from thirty percent Year 1 to sixty  
2     percent in Year 5.

3                     And those percentages are based on --  
4     that you use, are based on what? Thirty percent  
5     and sixty percent?

6             A.       Yeah. But this is estimating  
7     something different. I mean, Row 2 is estimating  
8     the proportion of individuals with opioid use  
9     disorder to receive treatment. Whereas, Row 4 is  
10    estimating the proportion of individuals with OUD  
11    in treatment to receive medication-assisted  
12    therapies.

13            Q.       Right.

14            A.       So Rows 2 and 4 are doing different  
15    things. But you're correct that the source for Row  
16    4 is based on Ohio-specific TEDS data, as well as  
17    information from the Substance Abuse and Mental  
18    Health Services Administration.

19            Q.       Okay. What steps did you take to  
20    confirm that the sixty percent goal that you have  
21    was achievable, in other words, that sixty percent  
22    of OUD treated population would accept MAT?

23            A.       Well, I just want to correct one  
24    thing that I said.

25                     In looking at this, I think that

1     there was just one source. I think my last answer  
2     suggested that there were two separate sources.  
3     But I think the source was one and the same, which  
4     is the SAMHSA data, the Substance Abuse and Mental  
5     Health Services Administration data.

6             But you asked what reason do I have  
7     to believe that sixty percent is achievable, and  
8     that that many people will accept MAT. And I think  
9     your question is a great one, and it points out  
10    that there has been widespread stigma and  
11    misinformation about medications to treat addiction  
12    that have contributed to the very tepid uptake of  
13    these treatments in some settings.

14            And so that's why one of the things  
15    that I recommend are broad, multi-faceted campaigns  
16    to destigmatize these FDA-approved evidence-based  
17    treatments. I think sixty percent is achievable  
18    based on the totality of evidence that I have  
19    reviewed.

20            Q.     Okay. And can you provide any  
21    specifics, other than the totality of evidence, as  
22    to what you relied upon for that?

23            A.     I can, but it will take time. I  
24    would want to review with you the sections of my  
25    report that discuss stigma, the sections of my

1 report that discuss --

2 I'm sorry. I'm getting a -- some  
3 Zoom alert.

4 The sections of my report that  
5 discuss a treatment uptake. The information that's  
6 contained within the SAMHSA materials that I  
7 reference, and so on and so forth.

8 Q. If you look at Exhibit 3D -- not  
9 Exhibit 3D, Section 3D of your redress model. And  
10 this speaks to mental health counseling and grief  
11 support; is that right?

12 A. Yes, it does.

13 Q. In a family with opioid-related  
14 death, what percentage -- based on your redress  
15 model, what percentage of the family members are  
16 you assuming will want or need grief support? Are  
17 you assuming all members or a percentage less than  
18 all?

19 A. I believe all members. I cite the  
20 median household size in Lake County as being 2.4  
21 individuals. And then multiply the total number of  
22 opioid deaths by that number.

23 I mean, there are a lot of ripples of  
24 the effect of -- an overdose death has. But I  
25 suppose a conservative estimate is focusing just on

1 the nuclear family alone, although this is a  
2 multigeneral -- multigenerational epidemic all too  
3 often, and the loss is felt and ricochets  
4 throughout different generations.

5 Q. So it says in Note 6, input is  
6 fifteen hundred. What does that number represent  
7 where it says fifteen hundred?

8 A. Yeah. That's focused on individuals  
9 with chronic pain. So the idea here for this  
10 abatement remedy is not just to focus on those that  
11 have lost loved ones, but also to improve the  
12 quality of care for individuals with chronic pain.  
13 Because, in many cases, opioids have been  
14 oversupplied at the expense of other safer and more  
15 effective alternatives.

16 And so that number, fifteen hundred,  
17 is derived from estimates regarding the total  
18 number of individuals to receive mental health  
19 counseling, as well as the number of bereaved  
20 family members to receive support.

21 Q. Okay. The -- at the -- your citation  
22 for that number, number of unique patients per  
23 counts per year, six patients per day, at the end  
24 it says, "Expert opinion." And we see that at  
25 various points throughout your report.

1                   When you say "expert opinion," what  
2                   are you referring to? Is that your opinion?

3                   A.       Well, in many cases, expert opinion  
4                   is listed as one of many different inputs for a  
5                   given parameter. So there may be three or four  
6                   alternative estimates of a number like the number  
7                   of lives saved for every naloxone dose distributed,  
8                   or something like that.

9                   And so, in some cases, expert opinion  
10                  I've provided as an additional input because it  
11                  takes expert opinion in order to interpret and  
12                  combine and assimilate different data sources that  
13                  may use different methods to estimate slightly  
14                  different measures in slightly different  
15                  populations and so on and so forth.

16                  In other cases, there was no such  
17                  literature available. And in those instances,  
18                  expert opinion represents the combined expertise of  
19                  myself as well as other experts who I may have  
20                  consulted with in arriving at any particular  
21                  estimate.

22                  Q.       Okay. Now, when you -- the first  
23                  circumstance where you identify -- you said there's  
24                  various sources. And you then take that and  
25                  compile your own -- it sounded like you then gather



1     that information and come to some assumptions based  
2     on that. And that may not be using your exact  
3     words.

4                     But I don't think, in those  
5     situations -- or I haven't seen a situation where  
6     there's referenced expert opinions, and then the  
7     various sources you are gathering and combining are  
8     cited. Or am I incorrect on that? Do you leave  
9     those sources that you're referring to out?

10             A.       No. In no case did I omit sources,  
11     that I'm aware of, from my expert report.

12                     So if there was a setting where I was  
13     looking at a number of different data sources, and  
14     then interpreting the optimal value based on those,  
15     using expert opinion, I would -- I would stipulate  
16     such.

17             Q.       Okay. So for this instance, then,  
18     are you saying that that's the second category, the  
19     instance I'm looking under 3D, where it says,  
20     "Expert opinion," you didn't have these various  
21     data sources, you just based that on your own  
22     expert view; is that right?

23             A.       In this type of instance, "expert  
24     opinion" refers to my best estimates, which, in  
25     many cases, were based on further discussion with

1 other health policy, public health, addiction and  
2 pharmacy experts.

3 Q. Turning back to 1C of your report.  
4 Turning -- let's go to 3. I'm sorry. Let's go  
5 back to 3. 3C before we go to 1C.

6 In this situation, I note under,  
7 "Suggested costs," you have some information. And  
8 then you cite the Washington Statewide Reentry  
9 Council as a basis for that.

10 Is there a reason that you didn't  
11 use -- attempt to use Ohio-based figures to come to  
12 that conclusion?

13 MR. ARNOLD: Objection to form.

14 A. I always used local data when I felt  
15 that the local data was the best data to be used.

16 I mean, my North Star is: What's the  
17 best data source for this particular question?

18 And as I described in my expert  
19 report, I used a careful process, and a  
20 conservative process, to identify those sources.

21 Q. (BY MR. MANNIX:) If you look at 1C.  
22 Go to 1C. When you reference --

23 MR. MANNIX: Are you there yet?

24 Q. (BY MR. MANNIX:) Do you have that in  
25 front of you, Doctor, or do you want to --

1           A.       Yes.    Yes, I do.

2           Q.       Okay.

3           A.       Although, it would be helpful to,  
4   yeah, show it here too.   But, yes, I do.

5                   MR. MANNIX:   Okay.   There you go.  
6   Here we go.

7           Q.       (BY MR. MANNIX:)   So, again, if you  
8   go down to the bottom there where it says,  
9   "Suggested costs," and you're providing potential  
10   costs for these programs, you're using California  
11   and Washington information.

12                   Is there a reason, in that instance,  
13   why you didn't use Ohio information?

14                   Well, let me ask you this:   Did you  
15   look for Ohio information that related to that?

16           A.       Yes, I did.

17           Q.       And you couldn't find it?

18           A.       Well, I may have found something, but  
19   I -- if I found it, then it -- if I found it and  
20   it's not referenced here -- if I found it, then  
21   it's referenced somewhere in my report.

22                   And if it's not included here, it's  
23   because I didn't feel that it was the best source  
24   of information to use.

25                   So I may have found something

1 locally; I don't know. But I can tell you that --  
2 that the quality of information matters a great  
3 deal here, as does the potential similarity or  
4 dissimilarity in what's being estimated between  
5 where -- the population where it's being estimated  
6 and Lake and Trumbull Counties.

7 Q. Okay. Now, you've provided testimony  
8 and were retained in a King County, Washington  
9 case, correct, previous to this case?

10 A. I mean, I was retained in a  
11 Washington case that I think has been disclosed.  
12 And anything that I've been retained in that has  
13 been disclosed has been disclosed in an appendix.

14 Q. No. And I understand that. I  
15 just -- I'm looking here in your report. You  
16 submitted a report, in January of 2021, for a State  
17 of Washington versus McKesson, Washington Superior  
18 Court, King County. And I wanted to understand if  
19 that information that you have included there was  
20 taken from that -- the work on that case?

21 A. I don't know the answer to that. But  
22 I can tell you that it has been very helpful to  
23 have been -- had the opportunity to be engaged in  
24 multiple cases because it has allowed for me to  
25 develop a confident appraisal of the evidence base

1 supporting the interventions and the costs of the  
2 interventions that I propose.

3 Q. With respect to the interplay between  
4 your report and the redress models you have here,  
5 can you explain the relationship between the  
6 discussion in your report and the selected  
7 components that are included in your redress  
8 models?

9 A. There's a very close relationship  
10 between the discussion in my report and the  
11 interventions that are proposed in my redress  
12 models.

13 Q. Okay. And could you explain that,  
14 just in general, besides saying it's a close  
15 relationship?

16 A. Well, the redress models are my  
17 effort -- represent my effort to estimate the  
18 specific populations, and in select cases the costs  
19 of interventions as they would be applied to Lake  
20 or Trumbull Counties.

21 Q. And how did you select which inputs  
22 to include in the redress models for each category?

23 A. Well, that's hard to discuss in the  
24 abstract. But maybe we could look at a particular  
25 instance.

1           Q.       Okay. Why don't we take the  
2 example of -- what's up on the screen now?

3           A.       Drug disposal.

4           Q.       I don't know. Is that what's up  
5 there, 1C? Why don't we just go to 1A.

6           A.       Okay. So you asked how did I decide  
7 which inputs to use in developing this model. I  
8 thought through if academic detailing and  
9 continuing healthcare provider education were to be  
10 required, what would be important to know in order  
11 to estimate the populations of individuals to  
12 receive this.

13                   And so I felt, for example, that when  
14 it comes to academic detailing, it would be  
15 important for me to estimate Input 1: The total  
16 number of prescribers eligible in the County;

17                   Input 2: The number, the proportion  
18 to receive detailing;

19                   Input 3: Not the proportion, but the  
20 absolute number of providers to receive detailing;

21                   and, Input 4: The number of academic  
22 detailers required for that.

23                   So there's sort of a sequential  
24 process for any of these categories that I used in  
25 order to identify the components of a given

1 category.

2 Q. We were talking earlier in instances  
3 where you identify expert opinion as the source.  
4 And you said there's two situations. One where  
5 you -- there's not a specific data source, and you,  
6 based on your experience, come to that conclusion.

7 And there's others where -- I know  
8 I'm paraphrasing. There's data sources you gather  
9 and you use those to combine or correlate and come  
10 to expert opinion.

11 Can you show me examples, in your  
12 redress model, of the situation where you do have  
13 data sources and you're combining them or --

14 A. Sure.

15 Q. I just want to see one to make sure I  
16 know what you're talking about.

17 A. Of course. So Tab 1E, like echo, the  
18 description under Input 1, if you scroll down  
19 further -- right here is perfect.

20 So if you look at Row 28, you can see  
21 how this played out. So --

22 Q. Okay. Are you done testifying on  
23 that?

24 A. Yes, I am.

25 Q. When you said "played out," I thought

1       you were going to explain how it played out.

2               A.       Well, I -- yeah, I said "so" --

3               Q.       So that's an example --

4               A.       Sorry. Go ahead, please.

5               Q.       So the citations you have before the  
6       word "expert opinion" are what you took and you  
7       compiled and combined; is that right?

8               A.       Yeah. I mean --

9               Q.       "Combined" is the wrong word. Go  
10       ahead.

11              A.       I would say I synthesized --

12              Q.       Good.

13              A.       -- and interpreted.

14              Q.       That's right. So you synthesized and  
15       interpreted.

16                      And then if you go down a few lines  
17       below that under 4, there's one saying assuming one  
18       permanent site and one mobile van, expert opinion,  
19       that's an example of where you did not synthesize  
20       and interpret; is that right?

21              A.       Well, I mean, there's still  
22       synthesis. I think it's just a question at what  
23       level. I mean, I'm aware of the broad reach of  
24       syringe service programs. And there's a large  
25       literature supporting these that I discuss in my



1 report.

2 And so it's not as if -- and,  
3 frankly, the matter that there's a mobile van is  
4 very important. And there's evidence to support  
5 that as well.

6 So -- and a mobile van is going to  
7 reach different populations than the permanent site  
8 will.

9 So I don't want to misconstrue expert  
10 opinion as anything other than what it was, which  
11 was my effort to combine the totality of my  
12 knowledge, and in many cases, a reading of relevant  
13 literature with -- with my best judgment and, at  
14 times, the judgment of others with whom I  
15 consulted.

16 Q. Okay.

17 A. Let me -- let me try to say that more  
18 succinctly for you. There is still scientific  
19 sources of information that, broadly speaking, I  
20 rely upon, when I cite expert opinion alone, as the  
21 basis for a parameter.

22 It's simply that those sources of  
23 information are not so directly relevant that they  
24 would substantiate the parameter in and of  
25 themselves if I provided them.

1           Q.       But they are not cited in your  
2       report, so we can't look at those and analyze  
3       those?

4           A.       That's not true.

5           Q.       Well, give me the example of that one  
6       right there, assuming one --

7           A.       Okay.

8           Q.       -- permanent site and one mobile van.  
9                   Where can I see what you're  
10      interpreting and synthesizing there?

11          A.       I will be happy to do so. It will  
12      take a little bit of time, but I will be happy to  
13      do so.

14                   (Pause.)

15          A.       Okay. So for example, Paragraph 78  
16      from my report, "Mobile harm reduction programs are  
17      one tool to significantly improve access for  
18      hard-to-reach populations, including those that do  
19      not have access to transportation or who may reside  
20      in rural areas.

21                   "Mobile SSPs (syringe service  
22      programs), are already in use in other Ohio  
23      locations, including an SSP in Dayton, Reference  
24      260:

25                   "A review of twelve HIV outreach

1 programs, which included harm reduction services,  
2 found that clients who accessed mobile units were  
3 eighty-six times more likely to receive an HIV test  
4 than those who accessed other sites.

5 "Reference 261. The authors  
6 noted" -- and so on and so forth.

7 That's just one example. I could  
8 give you many more that support this assertion that  
9 there be both a mobile and a brick and mortar  
10 syringe service program.

11 Q. But for purposes of understanding and  
12 reviewing and interpreting your report, your  
13 expectation, for us to understand that, is that we  
14 would see expert report -- you don't cite it in the  
15 redress model, to then turn back to your section of  
16 your report that speaks to harm reduction and see  
17 if we can find it there; is that generally correct?

18 A. Well, I don't think it is a -- I  
19 mean, my report is, I think, fairly presented. But  
20 to answer your question specifically, I believe  
21 both the review of the -- I believe the review of  
22 my narrative report is a helpful complement to the  
23 review of any specific component of my redress  
24 models.

25 That's -- I mean, that gets to your

1 question as to what's the relationship between the  
2 narrative report and the redress models.

3 And the bottom line is that they  
4 support each other, and I think that they should be  
5 reviewed and interpreted in conjunction with one  
6 another, not in isolation.

7 MR. MANNIX: Why don't we do this,  
8 let's go off the record for -- take a quick break.

9 THE VIDEOGRAPHER: Off the record,  
10 3:21.

11 (Whereupon, a break was had from 3:21  
12 p.m. until 3:33 p.m. EDT)

13 THE VIDEOGRAPHER: We are back on the  
14 record at 3:33.

15 MR. MANNIX: Dr. Alexander, I do not  
16 have any further questions. Let me just confirm it  
17 from defense counsel. I understand -- I don't  
18 think they do, but I just want to make sure I don't  
19 have that incorrect.

20 Sharon, Adam --

21 MR. FOTIADES: No questions for CVS.

22 MS. DESH: Nothing from me, thank  
23 you.

24 MS. MOORE: No questions from  
25 Walmart. Thank you.

1 MS. BUECHNER: No questions for Rite  
2 Aid. Thank you.

3 MR. MANNIX: Okay. So that's it for  
4 now. We'll reserve our right. I think we're a  
5 little less than four and a half hours, so we'll  
6 reserve our right in Phase 2 to ask additional  
7 questions for the hour and a half we have not  
8 spent.

9 But other than that, we're ready to  
10 conclude.

11 THE VIDEOGRAPHER: Okay. We will --

12 MR. ARNOLD: All right. Sorry.  
13 Plaintiffs do not have any questions.

14 I'm not sure if under the terms of  
15 the litigation or any agreement, whether you can  
16 save your hour and a half and use it later. But  
17 I'm sure we can discuss that later. I don't know  
18 one way or the other.

19 MR. MANNIX: Yeah. We don't need to  
20 resolve it now. I understand your thoughts and you  
21 know ours, so we'll deal with that later. Thanks.

22 A. Thank you very much.

23 THE VIDEOGRAPHER: Okay. We're off  
24 the record, 3:34.

25

(Deposition concluded at 3:34 p.m. EDT)

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C E R T I F I C A T E

STATE OF ALABAMA  
JEFFERSON COUNTY

I hereby certify that the above and foregoing deposition was taken down by me in stenotypy, and the questions and answers thereto were reduced to typewriting under my supervision, and that the foregoing represents a true and correct transcript of the deposition given by said witness upon said hearing, to the best of my ability.

I further certify that I am neither of counsel nor of kin to the parties to the action, nor am I in anywise interested in the result of said cause.



LAURA H. NICHOLS

Commissioner-Notary Public, State of AL

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GA CCR No. 2714, Exp. 4/1/2022

TN LCR No. 679, Exp. 6/30/2021

Transcript Certified on 5/31/2021

Veritext Legal Solutions  
1100 Superior Ave  
Suite 1820  
Cleveland, Ohio 44114  
Phone: 216-523-1313

June 1, 2021

To: Andrew P. Arnold, Esq.

Case Name: National Prescription Opiate Litigation - Track 3

Veritext Reference Number: 4611957

Witness: Caleb Alexander, M.D.                      Deposition Date: 5/27/2021

Dear Sir/Madam:

Enclosed please find a deposition transcript. Please have the witness review the transcript and note any changes or corrections on the included errata sheet, indicating the page, line number, change, and the reason for the change. Have the witness' signature notarized and forward the completed page(s) back to us at the Production address shown above, or email to [production-midwest@veritext.com](mailto:production-midwest@veritext.com).

If the errata is not returned within thirty days of your receipt of this letter, the reading and signing will be deemed waived.

Sincerely,  
Production Department

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DEPOSITION REVIEW  
CERTIFICATION OF WITNESS

ASSIGNMENT REFERENCE NO: 4611957  
CASE NAME: National Prescription Opiate Litigation - Track 3  
DATE OF DEPOSITION: 5/27/2021  
WITNESS' NAME: Caleb Alexander, M.D.

In accordance with the Rules of Civil  
Procedure, I have read the entire transcript of  
my testimony or it has been read to me.  
I have made no changes to the testimony  
as transcribed by the court reporter.

\_\_\_\_\_  
Date Caleb Alexander, M.D.  
Sworn to and subscribed before me, a  
Notary Public in and for the State and County,  
the referenced witness did personally appear  
and acknowledge that:

They have read the transcript;  
They signed the foregoing Sworn  
Statement; and  
Their execution of this Statement is of  
their free act and deed.

I have affixed my name and official seal  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public  
\_\_\_\_\_  
Commission Expiration Date

DEPOSITION REVIEW  
CERTIFICATION OF WITNESS

ASSIGNMENT REFERENCE NO: 4611957

CASE NAME: National Prescription Opiate Litigation - Track 3

DATE OF DEPOSITION: 5/27/2021

WITNESS' NAME: Caleb Alexander, M.D.

In accordance with the Rules of Civil Procedure, I have read the entire transcript of my testimony or it has been read to me.

I have listed my changes on the attached Errata Sheet, listing page and line numbers as well as the reason(s) for the change(s).

I request that these changes be entered as part of the record of my testimony.

I have executed the Errata Sheet, as well as this Certificate, and request and authorize that both be appended to the transcript of my testimony and be incorporated therein.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Caleb Alexander, M.D.

Sworn to and subscribed before me, a Notary Public in and for the State and County, the referenced witness did personally appear and acknowledge that:

They have read the transcript;

They have listed all of their corrections in the appended Errata Sheet;

They signed the foregoing Sworn Statement; and

Their execution of this Statement is of their free act and deed.

I have affixed my name and official seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
Commission Expiration Date

ASSIGNMENT NO: 4611957

PAGE/LINE(S)	CHANGE	/REASON
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Date Caleb Alexander, M.D.

SUBSCRIBED AND SWORN TO BEFORE ME THIS \_\_\_\_\_

DAY OF \_\_\_\_\_, 20\_\_\_\_.

Notary Public

Commission Expiration Date

[&amp; - 4]

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.



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COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

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